FACILITY INFORMATION

FACILITY NAME: Formosa Plastics Corporation, Texas			
LATITUDE: 28.682269	LONGITUDE: -96.55296	GPS DATUM: Google Earth	
SECTION/TOWNSHIP/RANGE:	FRS#/OIL DATABASE ID: R6-TX-00580	ICIS#:	
ADDRESS: 201 Formosa Drive			
CITY: Point Comfort	STATE: TX	ZIP: 77978	COUNTY: Calhoun
MAILING ADDRESS (IF DIFFERENT FROM FACILITY ADDRESS - IF NOT, PRINT "SAME"): 201 Formosa Drive			
CITY: Point Comfort	STATE: TX	ZIP: 77978	COUNTY:
TELEPHONE: (512)987-7000	FACILITY CONTACT NAME/TITLE: JP Murray - Emergency Response Coordinator		
OWNER NAME: Formosa Plastics Corporation, LP			
OWNER ADDRESS: 9 Peach Tree Hill Rd.			
CITY: Livingston	STATE: NJ	ZIP: 07039	COUNTY: Essex
TELEPHONE: 361-987-7140	FAX:	EMAIL: J.P.M@ftpc.fpcusa.com	
FACILITY OPERATOR NAME (IF DIFFERENT FROM OWNER - IF NOT, PRINT "SAME"): SAME			
OPERATOR ADDRESS:			
CITY:	STATE:	ZIP:	COUNTY:
TELEPHONE:	OPERATOR CONTACT NAME/TITLE:		
FACILITY TYPE: Chemical Manufacturing		NAICS CODE: 325211	
HOURS PER DAY FACILITY ATTENDED: 24/7	TOTAL FACILITY CAPACITY: 89,368,992 gal		
TYPE(S) OF OIL STORED: Diesel, Naptha, Wash Oil, Pygas, Mineral Oil, Transformer Oil			
LOCATED IN INDIAN COUNTRY? ☐ YES ☒ NO RESERVATION NAME:			

INSPECTION/PLAN REVIEW INFORMATION

PLAN REVIEW DATE: 3/8/2023	REVIEWER NAME: Chris Perry	
INSPECTION DATE: 3/14/2023	TIME: 8:30:00 AM	ACTIVITY ID NO: SPCC-TX-2023-00169
LEAD INSPECTOR: Chris Perry		
OTHER INSPECTOR(S): Matt Loesel, Tom McKay		

INSPECTION ACKNOWLEDGEMENT

I performed an SPCC inspection at the facility specified above.

INSPECTOR SIGNATURE:	DATE: **3/14/2023**
SUPERVISOR REVIEW/SIGNATURE: Thomas J McKay	DATE: 3/17/2023

90056149

SPCC GENERAL APPLICABILITY— 40 CFR 112.1

IS THE FACILITY REGULATED UNDER 40 CFR part 112?

The completely buried oil storage capacity is over 42,000 U.S. gallons, **OR** the aggregate aboveground oil storage capacity is over 1,320 U.S. gallons **AND** — ☒ YES ☐ NO

The facility is a non-transportation-related facility engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, which due to its location could reasonably be expected to discharge oil into or upon the navigable waters of the United States — ☒ YES ☐ NO

AFFECTED WATERWAY(S): Cox Creek and Lavaca Bay	DISTANCE: 500’

FLOW PATH TO WATERWAY:

The Shore Tank Farm and Production Complex drain west to east and enter Cox Creek which flows south into Lavaca Bay.

Note: The following storage capacity is not considered in determining applicability of SPCC requirements:

- *Equipment subject to the authority of the U.S. Department of Transportation, U.S. Department of the Interior, or Minerals Management Service, as defined in Memoranda of Understanding dated November 24, 1971, and November 8, 1993; Tank trucks that return to an otherwise regulated facility that contain only residual amounts of oil (EPA Policy letter)*
- *Completely buried tanks subject to all the technical requirements of 40 CFR part 280 or a state program approved under 40 CFR part 281;*
- *Underground oil storage tanks deferred under 40 CFR part 280 that supply emergency diesel generators at a nuclear power generation facility licensed by the Nuclear Regulatory Commission (NRC) and subject to any NRC provision regarding design and quality criteria, including but not limited to CFR part 50;*
- *Any facility or part thereof used exclusively for wastewater treatment (production, recovery or recycling of oil is not considered wastewater treatment); (This does not include other oil containers located at a wastewater treatment facility, such as generator tanks or transformers)*
- *Containers smaller than 55 U.S. gallons;*
- *Permanently closed containers (as defined in §112.2);*
- *Motive power containers (as defined in §112.2);*
- *Hot-mix asphalt or any hot-mix asphalt containers;*
- *Heating oil containers used solely at a single-family residence;*
- *Pesticide application equipment and related mix containers;*
- *Any milk and milk product container and associated piping and appurtenances; and*
- *Intra-facility gathering lines subject to the regulatory requirements of 49 CFR part 192 or 195.*

Does the facility have an SPCC Plan? — ☒ YES ☐ NO

FACILITY RESPONSE PLAN (FRP) APPLICABILITY— 40 CFR 112.20(f)

A non-transportation related onshore facility is required to prepare and implement an FRP as outlined in 40 CFR 112.20 if:

- ☒ The facility transfers oil over water to or from vessels and has a total oil storage capacity greater than or equal to 42,000 U.S. gallons, **OR**
- ☒ The facility has a total oil storage capacity of at least 1 million U.S. gallons, **AND** at least one of the following is true:
  - ☐ The facility does not have secondary containment sufficiently large to contain the capacity of the largest aboveground tank plus sufficient freeboard for precipitation.
  - ☒ The facility is located at a distance such that a discharge could cause injury to fish and wildlife and sensitive environments.
  - ☐ The facility is located such that a discharge would shut down a public drinking water intake.
  - ☐ The facility has had a reportable discharge greater than or equal to 10,000 U.S. gallons in the past 5 years.

Facility has FRP: ☒ YES ☐ NO ☐ NA	FRP Number: **FRP-06-TX-00580**

Facility has a completed and signed copy of Appendix C, Attachment C-II, “Certification of the Applicability of the Substantial Harm Criteria." — ☐ YES ☒ NO

Comments:

SPCC TIER II QUALIFIED FACILITY APPLICABILITY — 40 CFR 112.3(g)(2)	
The aggregate aboveground oil storage capacity is 10,000 U.S. gallons or less **AND**	☐ YES ☒ NO
In the three years prior to the SPCC Plan self-certification date, or since becoming subject to the rule (if the facility has been in operation for less than three years), the facility has **NOT** had:	
• A single discharge as described in §112.1(b) exceeding 1,000 U.S. gallons, **OR**	☐ YES ☒ NO
• Two discharges as described in §112.1(b) each exceeding 42 U.S. gallons within any twelve-month period[1]	☐ YES ☒ NO

IF YES TO ALL OF THE ABOVE, THEN THE FACILITY IS A TIER II QUALIFIED FACILITY[2]
SEE ATTACHMENT D FOR TIER II QUALIFIED FACILITY CHECKLIST

REQUIREMENTS FOR PREPARATION AND IMPLEMENTATION OF A SPCC PLAN— 40 CFR 112.3

Date facility began operations: **1981**

Date of initial SPCC Plan preparation: **1981** | Current Plan version (date/number): **July 1, 2021**

112.3(a)	**For facilities (except farms), including mobile or portable facilities:**	
	• In operation on or prior to November 10, 2011: Plan prepared and/or amended and fully implemented by **November 10, 2011**	☒ YES ☐ NO ☐ NA
	• Beginning operations after November 10, 2011, Plan prepared and fully implemented before beginning operations	☐ YES ☐ NO ☒ NA
	For farms (as defined in §112.2):	
	• In operation on or prior to August 16, 2002: Plan maintained, amended and implemented by **May 10, 2013**	☐ YES ☐ NO ☒ NA
	• Beginning operations after August 16, 2002 through May 10, 2013: Plan prepared and fully implemented by **May 10, 2013**	☐ YES ☐ NO ☒ NA
	• Beginning operations after May 10, 2013: Plan prepared and fully implemented before beginning operations	☐ YES ☐ NO ☒ NA
112.3(d)	Plan is certified by a registered Professional Engineer (PE) and includes statements that the PE attests:	☒ YES ☐ NO ☐ NA
	• PE is familiar with the requirements of 40 CFR part 112	☒ YES ☐ NO ☐ NA
	• PE or agent has visited and examined the facility	☒ YES ☐ NO ☐ NA
	• Plan is prepared in accordance with good engineering practice including consideration of applicable industry standards and the requirements of 40 CFR part 112	☒ YES ☐ NO ☐ NA
	• Procedures for required inspections and testing have been established	☒ YES ☐ NO ☐ NA
	• Plan is adequate for the facility	☒ YES ☐ NO ☐ NA

PE Name: Andy Coleman | **License No.:** 47532 | **State:** TX | **Date of certification:** 5/27/2021

112.3(e)(1)	Plan is available onsite if attended at least 4 hours per day. If facility is unattended, Plan is available at the nearest field office. *(Please note nearest field office contact information in comments below.)*	☒ YES ☐ NO ☐ NA

Comments:

[1] Oil discharges that result from natural disasters, acts of war, or terrorism are not included in this determination. The gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines not the total amount of oil spilled. The entire volume of the discharge is oil for this determination.

[2] An owner/operator who self-certifies a Tier II SPCC Plan may include environmentally equivalent alternatives and/or secondary containment impracticability determinations when reviewed and certified by a PE.

AMENDMENT OF SPCC PLAN BY REGIONAL ADMINISTRATOR (RA) — 40 CFR 112.4		
112.4(a),(c)	Has the facility discharged more than 1,000 U.S. gallons of oil in a single reportable discharge or more than 42 U.S. gallons in each of two reportable discharges in any 12-month period?[3]	☐ **YES** ☒ **NO**
If **YES**	• Was information submitted to the RA as required in §112.4(a)?[4]	☐ **YES** ☐ **NO** ☐ **NA**
	• Was information submitted to the appropriate agency or agencies in charge of oil pollution control activities in the State in which the facility is located§112.4(c)	☐ **YES** ☐ **NO** ☐ **NA**
	• Date(s) and volume(s) of reportable discharges(s) under this section:	
	• Were the discharges reported to NRC[5]?	☐ **YES** ☐ **NO**
112.4(d),(e)	Have changes required by the RA been implemented in the Plan and/or facility?	☐ **YES** ☐ **NO** ☒ **NA**
Comments:		

AMENDMENT OF SPCC PLAN BY THE OWNER OR OPERATOR — 40 CFR 112.5		
112.5(a)	Has there been a change at the facility that materially affects the potential for a discharge described in §112.1(b)?	☒ **YES** ☐ **NO**
If **YES**	• Was the Plan amended within six months of the change?	☒ **YES** ☐ **NO**
	• Were amendments implemented within six months of any Plan amendment?	☒ **YES** ☐ **NO**
112.5(b)	Review and evaluation of the Plan completed at least once every 5 years?	☒ **YES** ☐ **NO** ☐ **NA**
	Following Plan review, was Plan amended within six months to include more effective prevention and control technology that has been field-proven to significantly reduce the likelihood of a discharge described in §112.1(b)?	☐ **YES** ☐ **NO** ☒ **NA**
	Amendments implemented within six months of any Plan amendment?	☐ **YES** ☐ **NO** ☒ **NA**
	Five year Plan review and evaluation documented?	☒ **YES** ☐ **NO** ☐ **NA**
112.5(c)	Professional Engineer certification of any technical Plan amendments in accordance with all applicable requirements of §112.3(d) *[Except for self-certified Plans]*	☐ **YES** ☐ **NO** ☒ **NA**

Name:	License No:	State:	Date of Certification:

Reason for amendment:

Comments:

[3] A reportable discharge is a discharge as described in §112.1(b)(see 40 CFR part 110). The gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines not the total amount of oil spilled. The entire volume of the discharge is oil for this determination

[4] Triggering this threshold may disqualify the facility from meeting the Qualified Facility criteria if it occurred in the three years prior to self certification

[5] Inspector Note-Confirm any spills identified above were reported to NRC

GENERAL SPCC REQUIREMENTS—40 CFR 112.7		PLAN	FIELD
Management approval at a level of authority to commit the necessary resources to fully implement the Plan[6]		☒ YES ☐ NO	
Plan follows sequence of the rule or is an equivalent Plan meeting all applicable rule requirements and includes a cross-reference of provisions		☒ YES ☐ NO ☐ NA	
If Plan calls for facilities, procedures, methods, or equipment not yet fully operational, details of their installation and start-up are discussed *(Note: Relevant for inspection evaluation and testing baselines.)*		☐ YES ☐ NO ☒ NA	
112.7(a)(2)	The Plan includes deviations from the requirements of §§112.7(g), (h)(2) and (3), and (i) and applicable subparts B and C of the rule, except the secondary containment requirements in §§112.7(c) and (h)(1), 112.8(c)(2),112.8(c)(11), 112.12(c)(2), and 112.12(c)(11)	☐ YES ☐ NO ☒ NA	
If **YES**	• The Plan states reasons for nonconformance	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
	• Alternative measures described in detail and provide equivalent environmental protection (Note: Inspector should document if the environmental equivalence is implemented in the field, in accordance with the Plan's description)	☐ YES ☐ NO ☒ NA	

Describe each deviation and reasons for nonconformance:

**** The SPCC regulation is considered a performance based regulation, which means that the SPCC plan should explain in detail how the facility meets each line item of the regulation.**

[6] May be part of the Plan or demonstrated elsewhere.

		PLAN	FIELD
112.7(a)(3)	Plan describes physical layout of facility and includes a diagram[7] that identifies: • Location and contents of all regulated fixed oil storage containers • Storage areas where mobile or portable containers are located • Completely buried tanks otherwise exempt from the SPCC requirements (marked as "exempt") • Transfer stations • Connecting pipes, including intra-facility gathering lines that are otherwise exempt from the requirements of this part under §112.1(d)(11)	☒ YES ☐ NO	☒ YES ☐ NO
	Plan addresses each of the following:		
(i)	For each fixed container, type of oil and storage capacity (see Attachment A of this checklist). For mobile or portable containers, type of oil and storage capacity for each container or an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities	☒ YES ☐ NO	☒ YES ☐ NO
(ii)	Discharge prevention measures, including procedures for routine handling of products (loading, unloading, and facility transfers, etc.)	☐ YES ☒ NO	☒ YES ☐ NO
(iii)	Discharge or drainage controls, such as secondary containment around containers, and other structures, equipment, and procedures for the control of a discharge	☒ YES ☐ NO	☒ YES ☐ NO
(iv)	Countermeasures for discharge discovery, response, and cleanup (both facility's and contractor's resources)	☒ YES ☐ NO	☒ YES ☐ NO
(v)	Methods of disposal of recovered materials in accordance with applicable legal requirements	☒ YES ☐ NO	
(vi)	Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with an agreement for response, and all Federal, State, and local agencies who must be contacted in the case of a discharge as described in §112.1(b)	☒ YES ☐ NO	
112.7(a)(4)	***Does not apply if the facility has submitted an FRP under §112.20:*** ☐ YES ☐ NO ☒ NA Plan includes information and procedures that enable a person reporting an oil discharge as described in §112.1(b) to relate information on the: • Exact address or location and phone number of the facility; • Date and time of the discharge; • Type of material discharged; • Estimates of the total quantity discharged; • Estimates of the quantity discharged as described in §112.1(b); • Source of the discharge; • Description of all affected media; • Cause of the discharge; • Damages or injuries caused by the discharge; • Actions being used to stop, remove, and mitigate the effects of the discharge; • Whether an evacuation may be needed; and • Names of individuals and/or organizations who have also been contacted.		
112.7(a)(5)	***Does not apply if the facility has submitted a FRP under §112.20:*** ☐ YES ☐ NO ☒ NA Plan organized so that portions describing procedures to be used when a discharge occurs will be readily usable in an emergency		
112.7(b)	Plan includes a prediction of the direction, rate of flow, and total quantity of oil that could be discharged for each type of major equipment failure where experience indicates a reasonable potential for equipment failure	☐ YES ☒ NO ☐ NA	

Comments:

112.7(a)(3)(l) The above items were not fully discussed in the provided SPCC plan. The plan did state the transfer procedures follow DOT requirements, but it failed to include the actual procedures.
112.7(b) The plan did not show the prediction of rate of flow or spill direction outside of containment for each type of equipment failure.

[7] Note in comments any discrepancies between the facility diagram, the description of the physical layout of facility, and what is observed in the field

		PLAN	FIELD
112.7(c)	Appropriate containment and/or diversionary structures or equipment are provided to prevent a discharge as described in §112.1(b), **except as provided in §112.7(k) of this section for certain qualified operational equipment.** The entire containment system, including walls and floors, are capable of containing oil and are constructed to prevent escape of a discharge from the containment system before cleanup occurs. The method, design, and capacity for secondary containment address the typical failure mode and the most likely quantity of oil that would be discharged. See Attachment A of this checklist. **For onshore facilities**, one of the following or its equivalent: • Dikes, berms, or retaining walls sufficiently impervious to contain oil; • Curbing or drip pans; • Sumps and collection systems; • Culverting, gutters or other drainage systems; • Weirs, booms or other barriers; • Spill diversion pond; • Retention ponds; or • Sorbent materials		
	Identify which of the following are present at the facility and if appropriate containment and/or diversionary structures or equipment are provided as described above:		
	☒ Bulk storage containers	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
	☒ Mobile/portable containers	☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA
	☒ Oil-filled operational equipment (as defined in 112.2)	☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA
	☐ Other oil-filled equipment (i.e., manufacturing equipment)	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
	☒ Piping and related appurtenances	☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA
	☐ Mobile refuelers or non-transportation-related tank cars	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
	☒ Transfer areas, equipment and activities	☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA
	☐ Identify any other equipment or activities that are not listed above:	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
112.7(d)	Secondary containment for one (or more) of the following provisions is determined to be impracticable: ☐ General secondary containment §112.7(c) ☐ Bulk storage containers §§112.8(c)(2)/112.12(c)(2) ☐ Loading/unloading rack §112.7(h)(1) ☐ Mobile/portable containers§§112.8(c)(11)/ 112.12(c)(11)	☐ YES ☒ NO	
If **YES**	• The impracticability of secondary containment is clearly demonstrated and described in the Plan	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
	• For bulk storage containers[8], periodic integrity testing of containers and integrity and leak testing of the associated valves and piping is conducted	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
	(Does not apply if the facility has submitted an FRP under §112.20): • Contingency Plan following the provisions of 40 CFR part 109 is provided (see Appendix C of this checklist) **AND**	☐ YES ☐ NO ☒ NA	
	• Written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA

Comments:

112.7(c) The plan does not explain how they provide secondary containment for the above items that are marked.

[8] These additional requirements apply only to bulk storage containers, when an impracticability determination has been made by the PE

		PLAN	FIELD
112.7(e)	Inspections and tests conducted in accordance with written procedures	☐ YES ☒ NO	☒ YES ☐ NO
	Record of inspections or tests signed by supervisor or inspector	☐ YES ☒ NO	☒ YES ☐ NO
	Kept with Plan for at least 3 years (see Appendix B of this checklist) [9]	☒ YES ☐ NO	☒ YES ☐ NO
112.7(f)	Personnel, training, and oil discharge prevention procedures		
(1)	Training of oil-handling personnel in operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and contents of SPCC Plan	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(2)	Person designated as accountable for discharge prevention at the facility and reports to facility management	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(3)	Discharge prevention briefings conducted at least once a year for oil handling personnel to assure adequate understanding of the Plan. Briefings highlight and describe known discharges as described in §112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
112.7(g)	Plan describes how to: • Secure and control access to the oil handling, processing and storage areas; • Secure master flow and drain valves; • Prevent unauthorized access to starter controls on oil pumps; • Secure out-of-service and loading/unloading connections of oil pipelines; and • Address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges.	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
112.7(h)	Tank car and tank truck loading/unloading rack[10] is present at the facility *Loading/unloading rack* means a fixed structure (such as a platform, gangway) necessary for loading or unloading a tank truck or tank car, which is located at a facility subject to the requirements of this part. A loading/unloading rack includes a loading or unloading arm, and may include any combination of the following: piping assemblages, valves, pumps, shut-off devices, overfill sensors, or personnel safety devices.		☐ YES ☒ NO
If YES (1)	Does loading/unloading rack drainage flow to catchment basin or treatment facility designed to handle discharges or use a quick drainage system?	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
	Containment system holds at least the maximum capacity of the largest single compartment of a tank car/truck loaded/unloaded at the facility	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
(2)	An interlocked warning light or physical barriers, warning signs, wheel chocks, or vehicle brake interlock system in the area adjacent to the **loading or unloading rack** to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
(3)	Lower-most drains and all outlets on tank cars/trucks inspected prior to filling/departure, and, if necessary ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA

Comments:

112.7(e) The SPCC plan states inspections will be conducted following inspection procedures, but it fails to include the procedures that will be followed. The plan did not explain the inspections will be signed by the inspector or supervisor.

[9] Records of inspections and tests kept under usual and customary business practices will suffice
[10] Note that a tank car/truck loading/unloading rack must be present for §112.7(h) to apply

		PLAN	FIELD
112.7(i)	Brittle fracture evaluation of field-constructed aboveground containers is conducted after tank repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or after a discharge/failure due to brittle fracture or other catastrophe, and appropriate action taken as necessary (applies to only field-constructed aboveground containers)	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
112.7(j)	Discussion of conformance with applicable more stringent State rules, regulations, and guidelines and other effective discharge prevention and containment procedures listed in 40 CFR part 112	☐ YES ☒ NO ☐ NA	
112.7(k)	Qualified oil-filled operational equipment is present at the facility[11] ☒ YES ☐ NO *Oil-filled operational equipment* means equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device. Oil-filled operational equipment is not considered a bulk storage container, and does not include oil-filled manufacturing equipment (flow-through process). Examples of oil-filled operational equipment include, but are not limited to, hydraulic systems, lubricating systems (e.g. , those for pumps, compressors and other rotating equipment, including pumpjack lubrication systems), gear boxes, machining coolant systems, heat transfer systems, transformers, circuit breakers, electrical switches, and other systems containing oil solely to enable the operation of the device. If **YES** Check which apply: Secondary Containment provided in accordance with 112.7(c) ☐ Alternative measure described below (confirm eligibility) ☐		
112.7(k)	Qualified Oil-Filled Operational Equipment • Has a single reportable discharge as described in §112.1(b) from any oil-filled operational equipment exceeding 1,000 U.S. gallons occurred within the three years prior to Plan certification date?		☒ YES ☐ NO ☐ NA
	• Have two reportable discharges as described in §112.1(b) from any oil-filled operational equipment each exceeding 42 U.S. gallons occurred within any 12-month period within the three years prior to Plan certification date?[12]		☒ YES ☐ NO ☐ NA
	If YES for either, secondary containment in accordance with §112.7(c) is required		
	• Facility procedure for inspections or monitoring program to detect equipment failure and/or a discharge is established and documented	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
	Does not apply if the facility has submitted a FRP under §112.20: • Contingency plan following 40 CFR part 109 (see Attachment C of this checklist) is provided in Plan **AND**	☒ YES ☐ NO ☐ NA	
	• Written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful is provided in Plan	☒ YES ☐ NO ☐ NA	

Comments:

112.7(J-K) The requirements for the above sections were not discussed in detail in the plan.

[11] This provision does not apply to oil-filled manufacturing equipment (flow-through process)

[12] Oil discharges that result from natural disasters, acts of war, or terrorism are not included in this determination. The gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines not the total of oil amount of oil spilled. The entire volume of the discharge is oil for this determination.

ONSHORE FACILITIES (EXCLUDING PRODUCTION) 40 CFR 112.8/112.12		PLAN	FIELD
112.8(b)/ 112.12(b) Facility Drainage			
Diked Areas (1)	Drainage from diked storage areas is: • Restrained by valves, except where facility systems are designed to control such discharge, **OR** • Manually activated pumps or ejectors are used and the condition of the accumulation is inspected prior to draining dike to ensure no oil will be discharged	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(2)	Diked storage area drain valves are manual, open-and-closed design (not flapper-type drain valves) If drainage is released directly to a watercourse and not into an onsite wastewater treatment plant, retained storm water is inspected and discharged per §§112.8(c)(3)(ii), (iii), and (iv) or §§112.12(c)(3)(ii), (iii), and (iv).	☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA
Undiked Areas (3)	Drainage from undiked areas with a potential for discharge designed to flow into ponds, lagoons, or catchment basins to retain oil or return it to facility. Catchment basin located away from flood areas.[13]	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(4)	If facility drainage not engineered as in (b)(3) (i.e., drainage flows into ponds, lagoons, or catchment basins) then the facility is equipped with a diversion system to retain oil in the facility in the event of an uncontrolled discharge.[14]	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(5)	Are facility drainage waters continuously treated in more than one treatment unit and pump transfer is needed?	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
If **YES**	• Two "lift" pumps available and at least one permanently installed • Facility drainage systems engineered to prevent a discharge as described in §112.1(b) in the case of equipment failure or human error	☐ YES ☐ NO ☒ NA ☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA ☐ YES ☐ NO ☒ NA

Comments:

112.8(c)(1) The plan states that tanks should not be utilized for materials that are not compatible, but it fails to explain that the tanks are compatible for what is currently stored in them.
112.8(c)(3) The facility conducts drainage from the Shore Tank Farm to an open watercourse, but the plan fails to state that the drainage is conducted under responsible supervision.

112.8(c)/112.12(c) Bulk Storage Containers ☐ **N/A**

Bulk storage container means any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil-filled electrical, operating, or manufacturing equipment is not a bulk storage container.

If bulk storage containers are not present, mark this section Not Applicable (NA). If present, complete this section and Attachment A of this checklist.

(1)	Containers materials and construction are compatible with material stored and conditions of storage such as pressure and temperature.	☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA
(2)	Except for mobile refuelers and other non-transportation-related tank trucks, construct all bulk storage tank installations with secondary containment to hold capacity of largest container and sufficient freeboard for precipitation	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
	Diked areas sufficiently impervious to contain discharged oil **OR**	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
	Alternatively, any discharge to a drainage trench system will be safely confined in a facility catchment basin or holding pond	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA

[13] Oil discharges that result from natural disasters, acts of war, or terrorism are not included in this determination. The gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines not the total of oil amount of oil spilled.
[14] The entire volume of the discharge is oil for this determination.
These provisions apply only when a facility drainage system is used for containment; otherwise mark NA.

		PLAN	FIELD
(3)	If there is drainage of uncontaminated rainwater from diked areas into a storm drain or open watercourse?	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
If YES	• Bypass value normally sealed closed	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
	• Retained rainwater is inspected to ensure that its presence will not cause a discharge as described in §112.1(b)	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
	• Bypass value opened and resealed under responsible supervision	☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA
	• Adequate records of drainage are kept; for example, records required under permits issued in accordance with 40 CFR §§122.41(j)(2) and (m)(3)	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(4)	For completely buried metallic tanks installed on or after January 10,1974 (if not exempt from SPCC regulation because subject to all of the technical requirements of 40 CFR part 280 or 281):		
	• Provide corrosion protection with coatings or cathodic protection compatible with local soil conditions	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
	• Regular leak testing conducted	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
(5)	The buried section of partially buried or bunkered metallic tanks protected from corrosion with coatings or cathodic protection compatible with local soil conditions	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
(6)	• Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs. Techniques include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emission testing, or other system of non-destructive testing	☐ YES ☒ NO ☐ NA	☐ YES ☒ NO ☐ NA
	• Appropriate qualifications for personnel performing tests and inspections are identified in the Plan and have been assessed in accordance with industry standards	☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA
	• The frequency and type of testing and inspections are documented, are in accordance with industry standards and take into account the container size, configuration and design	☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA
	• Comparison records of aboveground container integrity testing are maintained	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
	• Container supports and foundations regularly inspected	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
	• Outside of containers frequently inspected for signs of deterioration, discharges, or accumulation of oil inside diked areas	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
	• Records of all inspections and tests maintained[15]	☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA
Integrity Testing Standard identified in the Plan: The plan states the facility is following API 653, but it fails to identify the type and frequency of the required integrity tests. The plan should also identify the credentials of the inspector who can conduct the tests. The plan identifies numerous tanks that fall under SP001 and not API 653, but the plan does not discuss the required tests for those tanks.The manger over testing stated that his group was not conducting tests on the smaller tanks. The plan needs to be updated to include the integrity testing discussion for all tanks and not just the larger ones.			
112.12 (c)(6)(ii) *(Applies to AFVO Facilities only)*	Conduct formal visual inspection on a regular schedule for bulk storage containers that meet all of the following conditions: • Subject to 21 CFR part 110; • Elevated; • Construction of austenitic stainless steel; • Have no external insulation; and • Shop-fabricated.	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
	In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas.	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA
	You must determine and document in the Plan the appropriate qualifications for personnel performing tests and inspections.[16]	☐ YES ☐ NO ☒ NA	☐ YES ☐ NO ☒ NA

[15] Records of inspections and tests kept under usual and customary business practices will suffice
[16] Identify each tank with either an A to indicate aboveground or B for completely buried.

		PLAN	FIELD
(7)	Leakage through defective internal heating coils controlled: • Steam returns and exhaust lines from internal heating coils that discharge into an open watercourse are monitored for contamination, **OR** • Steam returns and exhaust lines pass through a settling tank, skimmer, or other separation or retention system	☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA
(8)	Each container is equipped with at least one of the following for liquid level sensing: • High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station, or audible air vent in smaller facilities; • High liquid level pump cutoff devices set to stop flow at a predetermined container content level; • Direct audible or code signal communication between container gauger and pumping station; • Fast response system for determining liquid level (such as digital computers, telepulse, or direct vision gauges) and a person present to monitor gauges and overall filling of bulk containers; or • Regularity test liquid level sensing devices to ensure proper operation.	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(9)	Effluent treatment facilities observed frequently enough to detect possible system upsets that could cause a discharge as described in §112.1(b)	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(10)	Visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts are promptly corrected and oil in diked areas is promptly removed	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(11)	Mobile or portable containers positioned to prevent a discharge as described in §112.1(b). Mobile or portable containers (excluding mobile refuelers and other non-transportation-related tank trucks) have secondary containment with sufficient capacity to contain the largest single compartment or container and sufficient freeboard to contain precipitation	☒ YES ☐ NO ☐ NA ☐ YES ☒ NO ☐ NA	☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA
112.8(d)/112.12(d)Facility transfer operations, pumping, and facility process			
(1)	Buried piping installed or replaced on or after August 16, 2002 has protective wrapping or coating Buried piping installed or replaced on or after August 16, 2002 is also cathodically protected or otherwise satisfies corrosion protection standards for piping in 40 CFR part 280 or 281 Buried piping exposed for any reason is inspected for deterioration; corrosion damage is examined; and corrective action is taken	☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA
(2)	Piping terminal connection at the transfer point is marked as to origin and capped or blank-flanged when not in service or in standby service for an extended time	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(3)	Pipe supports are properly designed to minimize abrasion and corrosion and allow for expansion and contraction	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
(4)	Aboveground valves, piping, and appurtenances such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces are inspected regularly to assess their general condition Integrity and leak testing conducted on buried piping at time of installation, modification, construction, relocation, or replacement	☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA ☒ YES ☐ NO ☐ NA
(5)	Vehicles warned so that no vehicle endangers aboveground piping and other oil transfer operations	☒ YES ☐ NO ☐ NA	☒ YES ☐ NO ☐ NA
Comments:			

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ATTACHMENT A: SPCC FIELD INSPECTION AND PLAN REVIEW TABLE

Documentation of Field Observations for Containers and Associated Requirements

Inspectors should use this table to document observations of containers as needed.

Containers and Piping

Check containers for leaks, specifically looking for: drip marks, discoloration of tanks, puddles containing spilled or leaked material, corrosion, cracks, and localized dead vegetation, and standards/specifications of construction.

Check aboveground container foundation for: cracks, discoloration, and puddles containing spilled or leaked material, settling, gaps between container and foundation, and damage caused by vegetation roots.

Check all piping for: droplets of stored material, discoloration, corrosion, bowing of pipe between supports, evidence of stored material seepage from valves or seals, evidence of leaks, and localized dead vegetation. For all aboveground piping, include the general condition of flange joints, valve glands and bodies, drip pans, pipe supports, bleeder and gauge valves, and other such items (Document in comments section of §112.8(d) or 112.12(d).)

Secondary Containment (Active and Passive)

Check secondary containment for: containment system (including walls and floor) ability to contain oil such that oil will not escape the containment system before cleanup occurs, proper sizing, cracks, discoloration, presence of spilled or leaked material (standing liquid), erosion, corrosion, penetrations in the containment system, and valve conditions.

Check dike or berm systems for: level of precipitation in dike/available capacity, operational status of drainage valves (closed), dike or berm impermeability, debris, erosion, impermeability of the earthen floor/walls of diked area, and location/status of pipes, inlets, drainage around and beneath containers, presence of oil discharges within diked areas.

Check drainage systems for: an accumulation of oil that may have resulted from any small discharge, including field drainage systems (such as drainage ditches or road ditches), and oil traps, sumps, or skimmers. Ensure any accumulations of oil have been promptly removed.

Check retention and drainage ponds for: erosion, available capacity, presence of spilled or leaked material, debris, and stressed vegetation.

Check active measures (countermeasures) for: amount indicated in plan is available and appropriate; deployment procedures are realistic; material is located so that they are readily available; efficacy of discharge detection; availability of personnel and training, appropriateness of measures to prevent a discharge as described in §112.1(b).

Container ID/ General Condition[17] Aboveground or Buried Tank	Storage Capacity and Type of Oil	Type of Containment/ Drainage Control	Overfill Protection and Testing & Inspections
6460FB / AST	Py-gasoline / 1,869,000 gal	Earthen berm with drain valve	High level alarm
G460FB / AST	IPG Flux Oil / 1,056,804 gal	Earthen berm with drain valve	High level alarm

[17] Identify each tank with either an A to indicate aboveground or B for completely buried

ATTACHMENT A: SPCC FIELD INSPECTION AND PLAN REVIEW TABLE (CONT.)

Documentation of Field Observations for Containers and Associated Requirements

Container ID/ General Condition[17] Aboveground or Buried Tank	Storage Capacity and Type of Oil	Type of Containment/ Drainage Control	Overfill Protection and Testing & Inspections

[17] Identify each tank with either an A to indicate aboveground or B for completely buried

ATTACHMENT B: SPCC INSPECTION AND TESTING CHECKLIST

Required Documentation of Tests and Inspections

Records of inspections and tests required by 40 CFR part 112 signed by the appropriate supervisor or inspector must be kept by all facilities with the SPCC Plan for a period of three years. Records of inspections and tests conducted under usual and customary business practices will suffice. Documentation of the following inspections and tests should be kept with the SPCC Plan.

	Inspection or Test	Documentation		Not Applicable
		Present	Not Present	
112.7–General SPCC Requirements				
(d)	Integrity testing for bulk storage containers with no secondary containment system and for which an impracticability determination has been made	☐ YES	☐ NO	☒ NA
(d)	Integrity and leak testing of valves and piping associated with bulk storage containers with no secondary containment system and for which an impracticability determination has been made	☐ YES	☐ NO	☒ NA
(h)(3)	Inspection of lowermost drain and all outlets of tank car or tank truck prior to filling and departure from loading/unloading rack	☐ YES	☐ NO	☒ NA
(i)	Evaluation of field-constructed aboveground containers for potential for brittle fracture or other catastrophic failure when the container undergoes a repair, alteration, reconstruction or change in service or has discharged oil or failed due to brittle fracture failure or other catastrophe	☐ YES	☐ NO	☒ NA
k(2)(i)	Inspection or monitoring of qualified oil-filled operational equipment when the equipment meets the qualification criteria in §112.7(k)(1) and facility owner/operator chooses to implement the alternative requirements in §112.7(k)(2) that include an inspection or monitoring program to detect oil-filled operational equipment failure and discharges	☐ YES	☐ NO	☒ NA
112.8/112.12–Onshore Facilities (excluding oil production facilities)				
(b)(1), (b)(2)	Inspection of storm water released from diked areas into facility drainage directly to a watercourse	☒ YES	☐ NO	☐ NA
(b)(3)	Inspection of rainwater released directly from diked containment areas to a storm drain or open watercourse before release, open and release bypass valve under supervision, and records of drainage events	☒ YES	☐ NO	☐ NA
(c)(4)	Regular leak testing of completely buried metallic storage tanks installed on or after January 10, 1974 and regulated under 40 CFR 112	☐ YES	☐ NO	☒ NA
(c)(6)	Regular integrity testing of aboveground containers and integrity testing after material repairs, including comparison records	☒ YES	☐ NO	☐ NA
(c)(6), (c)(10)	Regular visual inspections of the outsides of aboveground containers, supports and foundations	☒ YES	☐ NO	☐ NA
(c)(6)	Frequent inspections of diked areas for accumulations of oil	☒ YES	☐ NO	☐ NA
(c)(8)(v)	Regular testing of liquid level sensing devices to ensure proper operation	☒ YES	☐ NO	☐ NA
(c)(9)	Frequent observations of effluent treatment facilities to detect possible system upsets that could cause a discharge as described in §112.1(b)	☒ YES	☐ NO	☐ NA
(d)(1)	Inspection of buried piping for damage when piping is exposed and additional examination of corrosion damage and corrective action, if present	☐ YES	☐ NO	☒ NA
(d)(4)	Regular inspections of aboveground valves, piping and appurtenances and assessments of the general condition of flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces	☒ YES	☐ NO	☐ NA
(d)(4)	Integrity and leak testing of buried piping at time of installation, modification, construction, relocation or replacement	☐ YES	☐ NO	☒ NA

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U.S. Environmental Protection Agency
Region 6

SPCC PHOTOGRAPHIC LOG

Facility Name & Location: Formosa Plastics Corporation, Texas	**Photographer:** Tom McKay	**Camera:** Canon SD-200 SN: 9124417892

Photograph Date
3/14/2023

Photo No.	**Time:**
0001	0957

Direction Photo Taken:
West

Photo Description:

Facility sign at entrance to Shore Tank Farm off SH 1593.

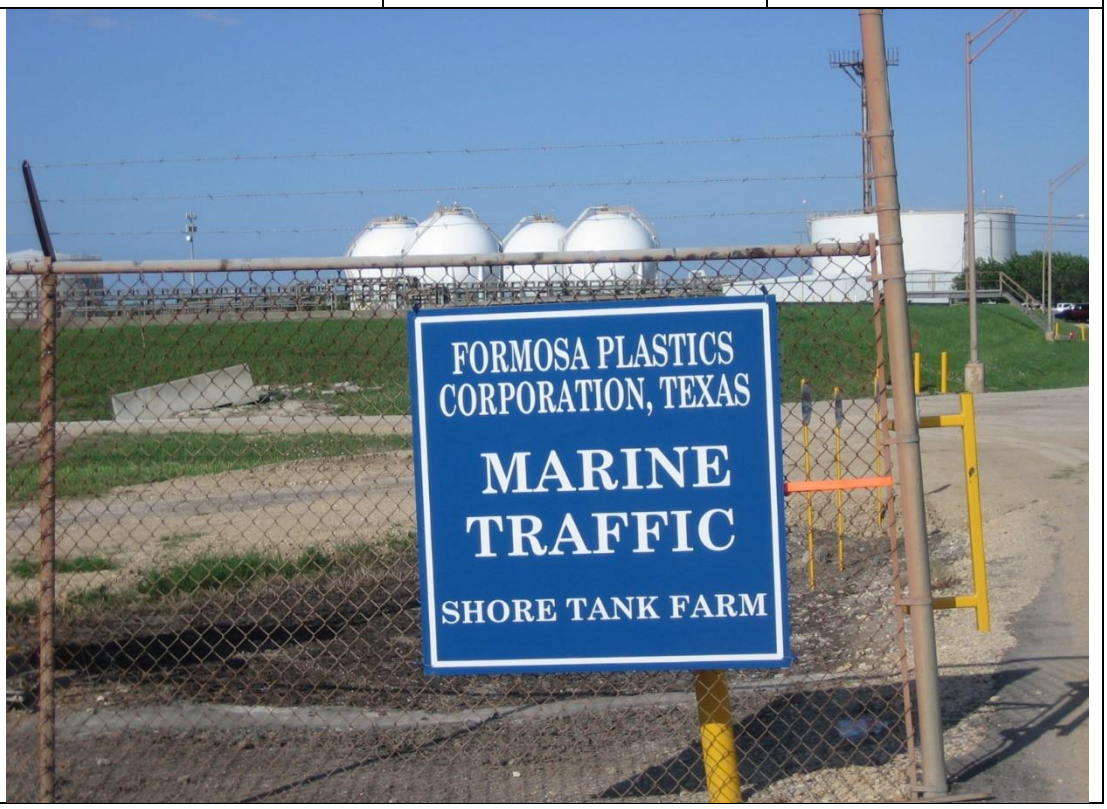


Photo No.	**Time:**
0002	0959

Direction Photo Taken:
SW

Photo Description:

Overview of Facility Tank No. FTD-03 containing 710,000 Barrels of Naptha and manufactured 2000. This is the worst-case discharge for the facility. Tank inspected this date with no issues, was within a secondary containment dike, and records including weekly, monthly, and API 653 integrity records were verified.

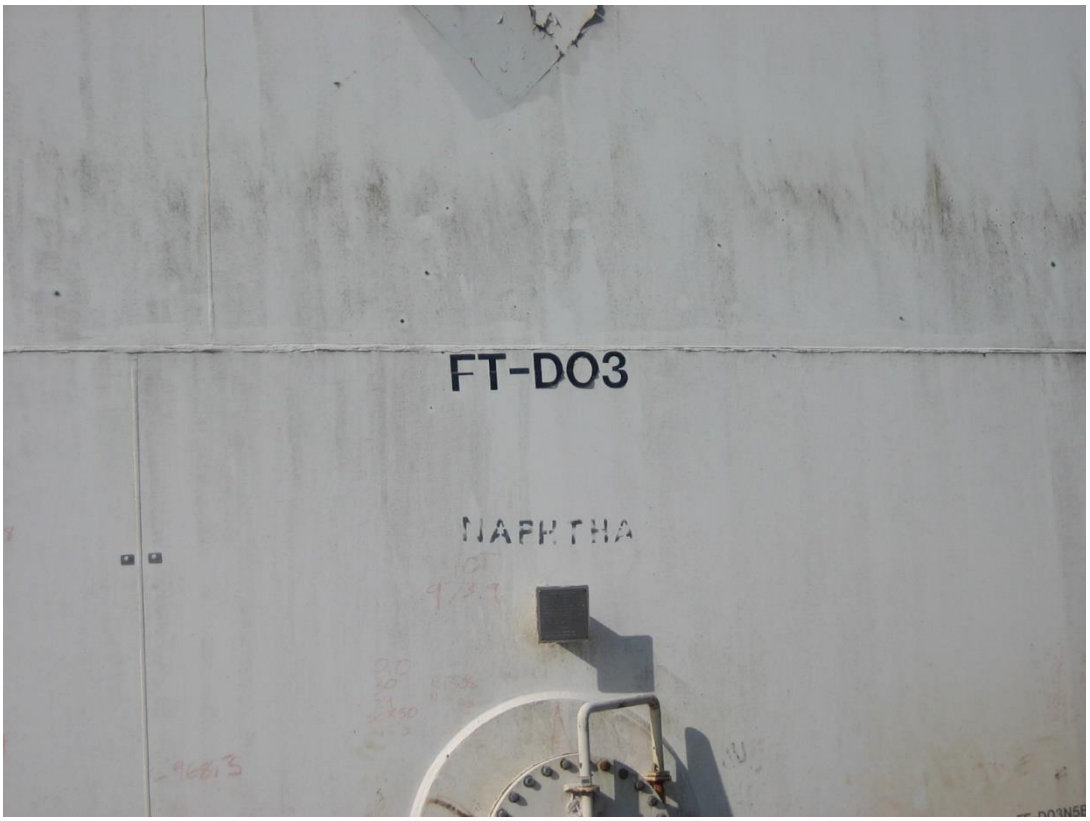
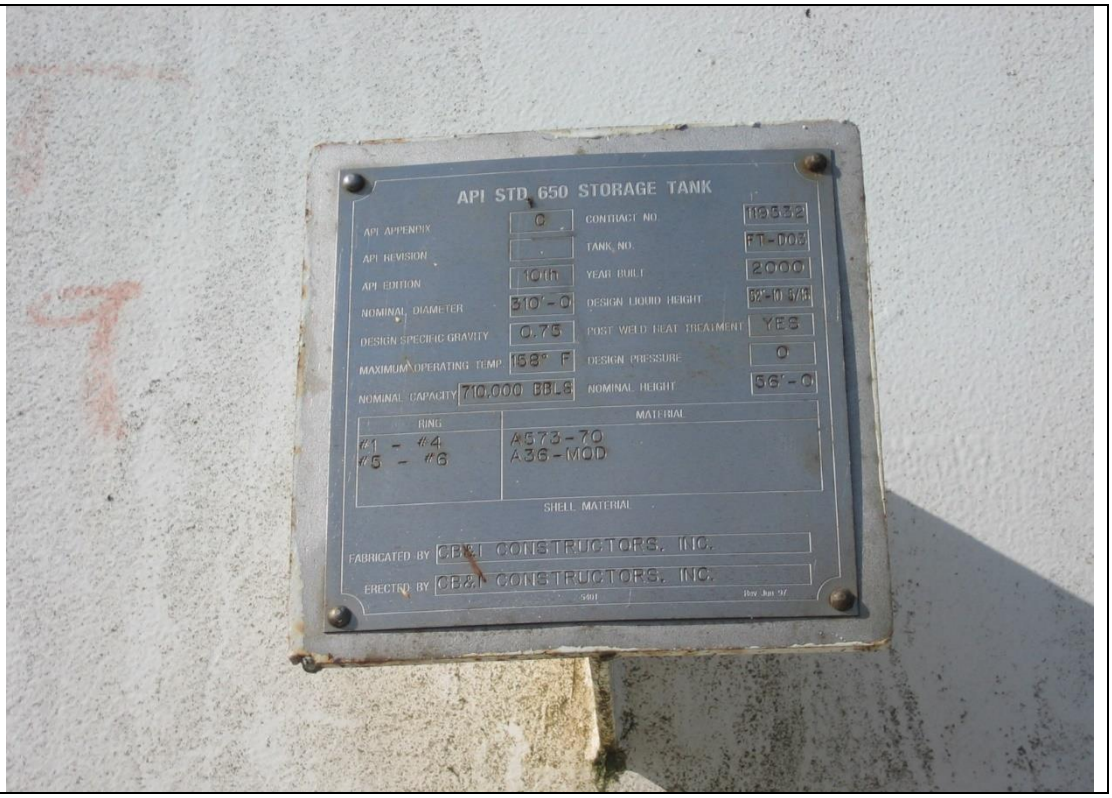
Photographer: Tom McKay	
Photo No. 0003	**Time:** 1002
Direction Photo Taken: SW	
Photo Description: Facility Tank Number and contents for aforementioned and inspected Naptha tank.	

Photo No. 0004	**Time:** 1003
Direction Photo Taken: SW	
Photo Description: Facility tank identification plate on aforementioned and inspected Naptha tank.	

Photographer: Tom McKay	
Photo No. 0005 / **Time:** 1026	
Direction Photo Taken: NW	
Photo Description: 1st valve inside secondary containment for the Naptha tank regulated by EPA. The piping ultimately leads to the Coast Guard regulated marine dock and loading area,	

Photo No. 0006 / **Time:** 1056	
Direction Photo Taken: NE	
Photo Description: NPDES outlet gate on NE side of Formosa Shore Tank Farm.	

Photographer:
Tom McKay

Photo No.	**Time:**
0007	1108

Direction Photo Taken:
SW

Secondary containment boom rollout located within the Coast Guard regulated marine dock.

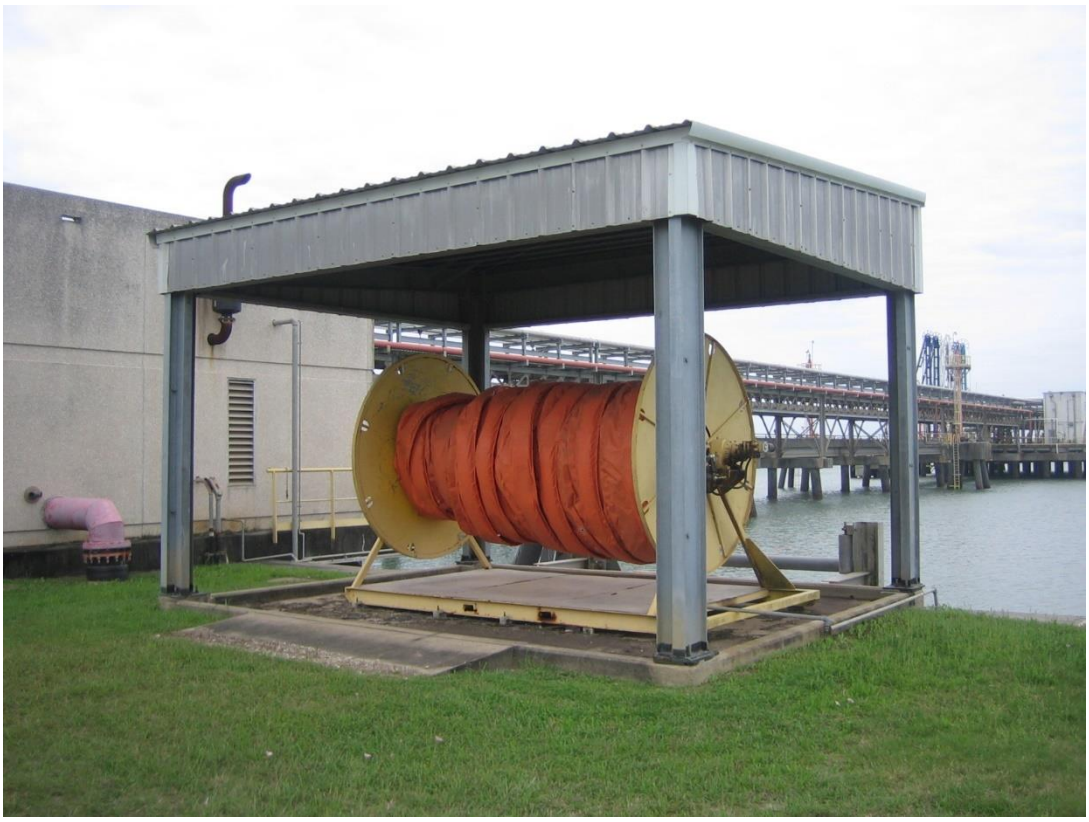
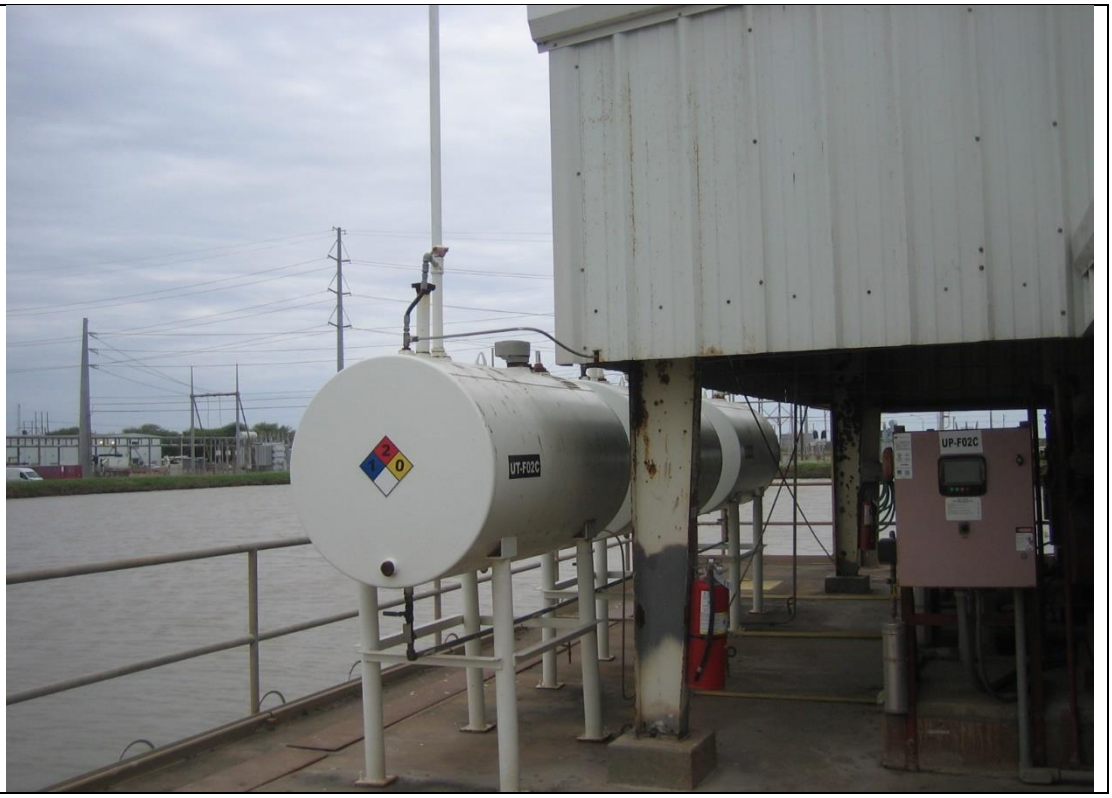


Photo No.	**Time:**
0008	1130

Direction Photo Taken:
SW

Photo Description:

Three (3) tanks subsequently verified as double-walled construction as well as elevated and used for facility operations located within the facility production complex.



Photographer:
Tom McKay

Photo No.	**Time:**
0009	1142

Direction Photo Taken:
NW

Photo Description:

Five (5) 600 gallon, single walled and elevated diesel tanks within concrete secondary containment dike used for facility operations located within the facility production complex.

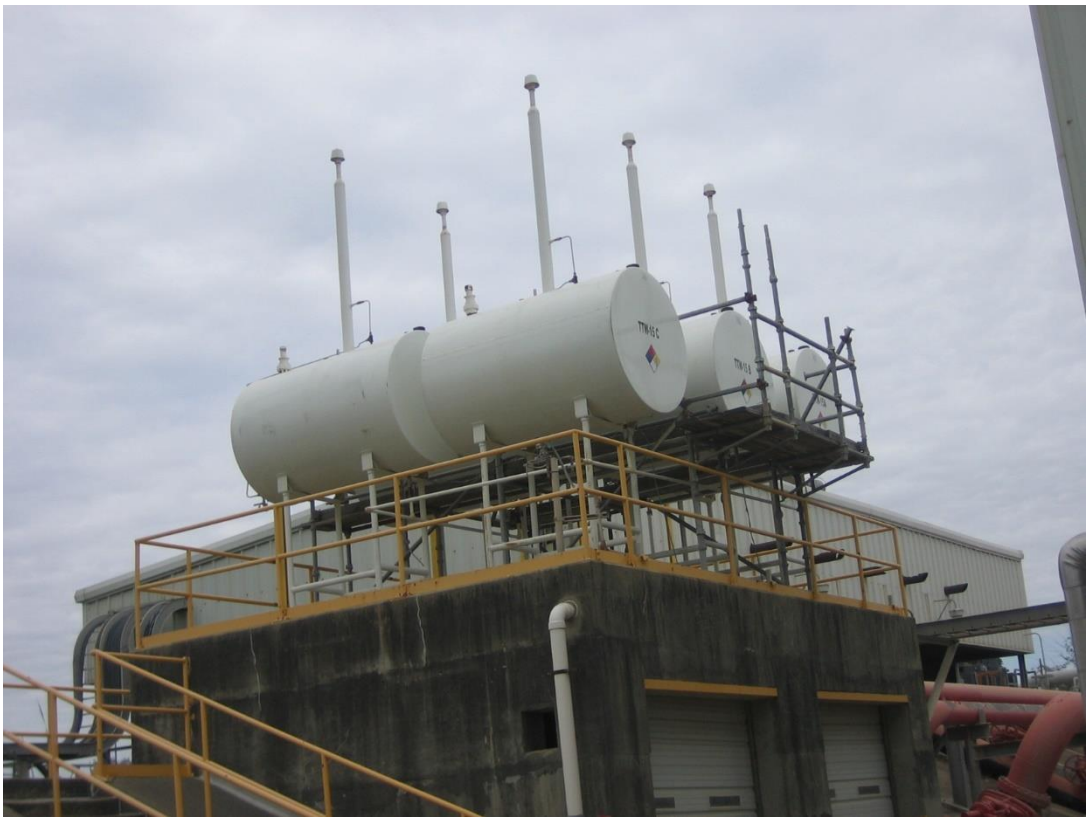
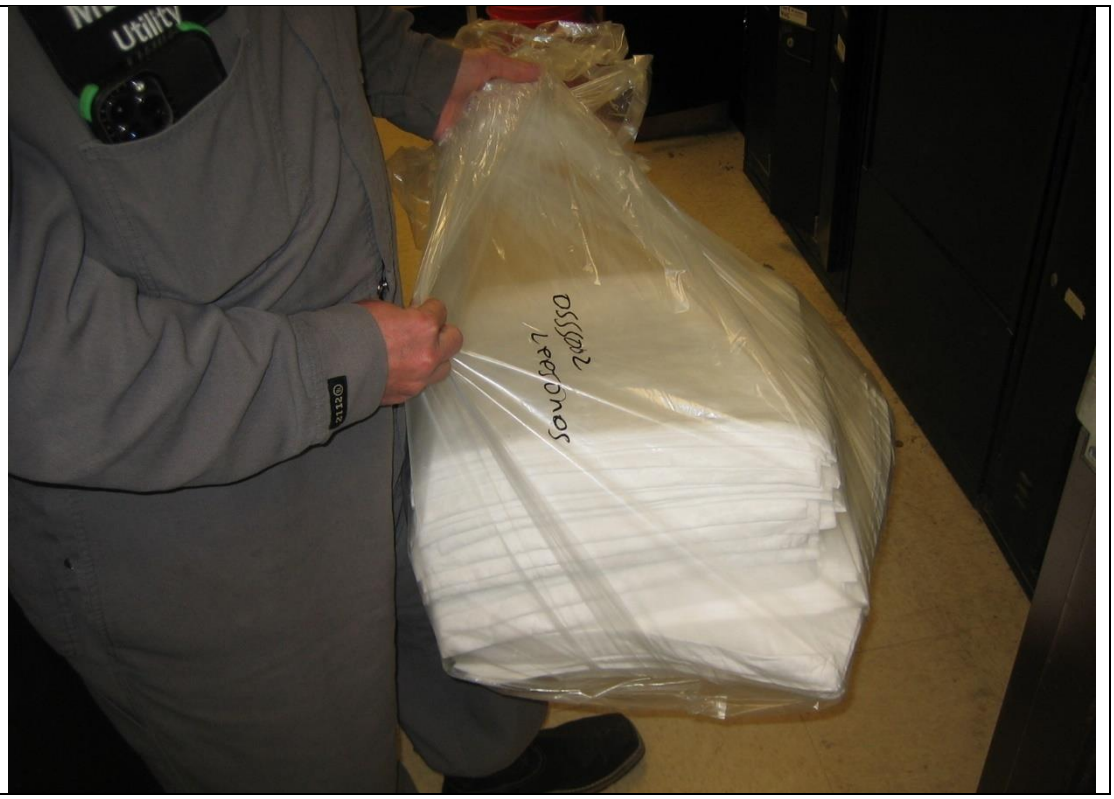


Photo No.	**Time:**
0010	1151

Direction Photo Taken:
East

Photo Description:

Sorbent pads used for general containment at the loading areas for the aforementioned diesel operations tanks



Photographer:
Tom McKay

Photo No.	**Time:**
0011	1208

Direction Photo Taken:
NW

Photo Description:

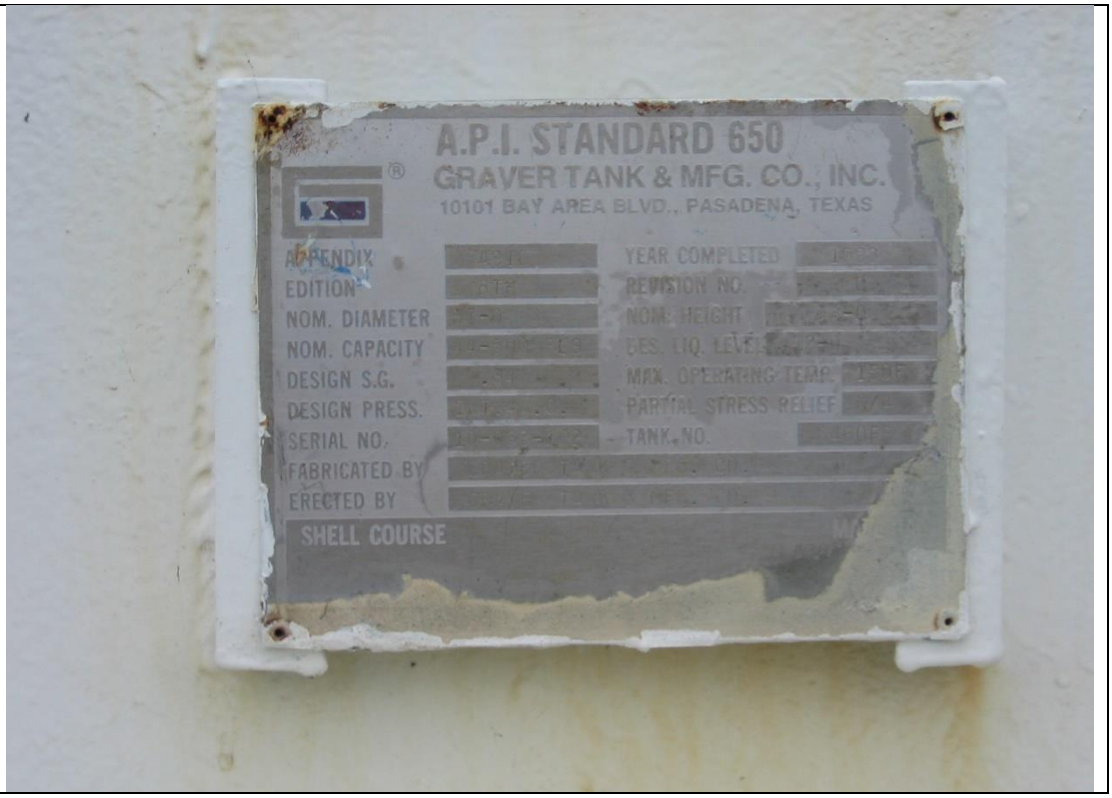
Facility Tank No. 6460FB containing 44,500 barrels of py-gasoline that was manufactured and erected in 1993 (see following identification plate for additional tank statistics). Tank inspected this date with no issues, was within a concrete secondary containment dike, and records including weekly, monthly, and API 653 integrity records were verified.

Photo No.	**Time:**
0012	1210

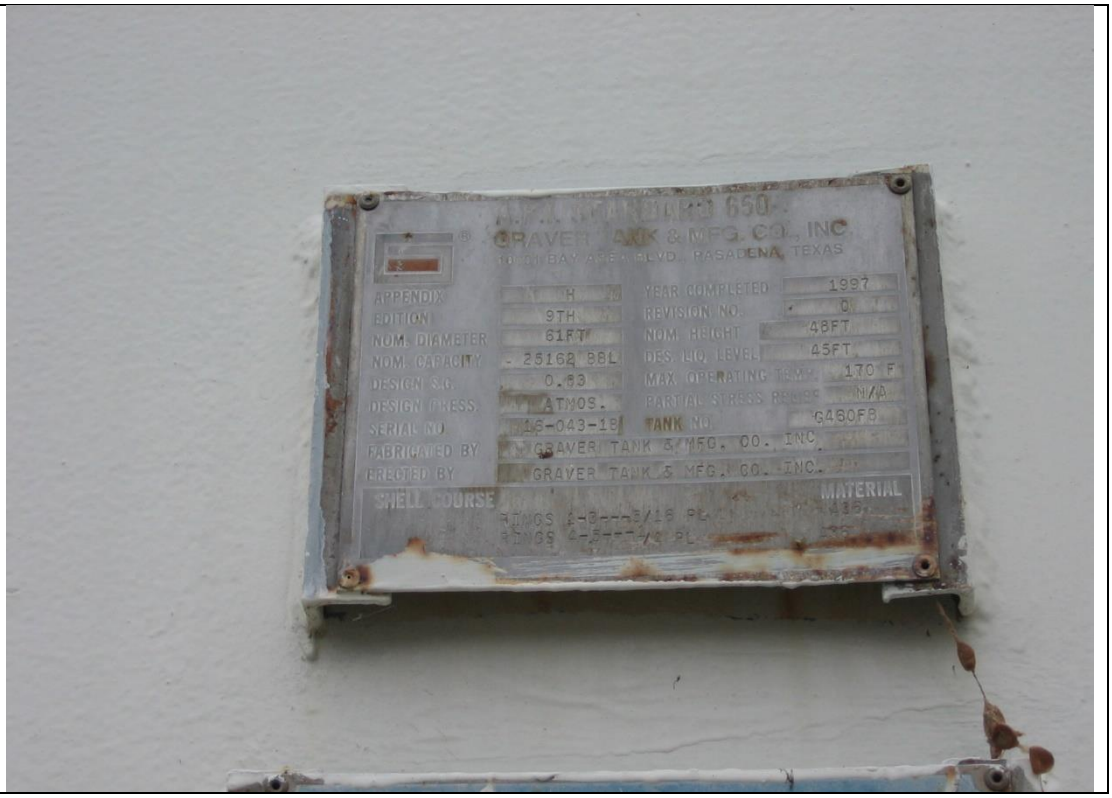
Direction Photo Taken:
NW

Photo Description:

Facility Tank No. 6460FB Py-gasoline tank identification plate.



Photographer: Tom McKay	
Photo No. 0013	**Time:** 1213
Direction Photo Taken: North	
Photo Description: Concrete secondary containment dike with ongoing crack maintenance and R&R for the facility 6460FB py-gasoline tank.	

Photo No. 0014	**Time:** 1221
Direction Photo Taken: NW	
Photo Description: Identification plate for Facility G460FB BTX (IPG Flux Oil) tank manufactured and erected in 1997. Tank inspected this date with no issues, was within a concrete secondary containment dike, and records including weekly, monthly, and API 653 integrity records were verified.	

Photographer:
Tom McKay

Photo No.	**Time:**
0015	1224

Direction Photo Taken:
NW

Photo Description:

Overview of Facility G460FB BTX (IPG Flux Oil) tank manufactured and erected in 1997 and within concrete, secondary containment dike.

Photo No.	**Time:**
0016	1237

Direction Photo Taken:
SE

Photo Description:

Facility Tank No. 6499FB containing Pyrolysis Fuel Oil, and it is directly connected to marine loading dock regulated by the US Coast Guard.

Photographer: Tom McKay	
Photo No. 0017 / **Time:** 1238	
Direction Photo Taken: NE	
Photo Description: 1st valve inside secondary containment for Facility Tank No. 6499FB containing Pyrolysis Fuel Oil delineating the EPA regulatory connection. Piping is subsequently connected to the Coast Guard regulated marine loading dock.	

Photo No. 0018 / **Time:** 1241	
Direction Photo Taken:	
Photo Description:	

U.S. EPA Facility Response Plan (FRP) -- Review Form

I. Facility Information

FRP Number: **FRP-06-TX-00580**	Facility Name: **Formosa Plastics Corporation, Texas**	
Facility Owner: **Formosa Plastics Corporation, LP**		
Facility Operator (if different from owner): same		
Mailing Address: 201 Formosa Drive		
City: Point Comfort	State: TX	Zip: 77978
Telephone: 361-987-2111	Fax:	
Latitude: 28.682269	Longitude: -96.55296	
Other Description or Directions:		
Site Location Map Attached (Y/N) : N		

INSPECTION ACKNOWLEDGMENT

I performed an FRP inspection at the facility specified above.

INSPECTOR SIGNATURE:  **DATE:** 3/14/2023

SUPERVISOR REVIEW/SIGNATURE:  **DATE:** 3/17/2023

II. Facility Overview

Date of Initial Facility Operation:	**Jan-81**	
Total Storage Capacity (bbls/gals):	**2,127,833 Bbl / 89,368,992 gal**	# Of Tanks: **?**
Worst Case Discharge (bbls/gals):	**834,350 Bbls / 35,042,700 gal (Naptha)**	
Actual Worst Case Discharge (barrels) calculated from Worst Case Discharge Worksheet	834350.00	
Actual Worst Case Discharge (gallons) calculated from Worst Case Discharge Worksheet	35042700	
Capacity of Largest Aboveground Storage Tank (bbls/gals):	**834,350 Bbls / 35,042,700 gal**	

Name of Affected Waterway(s)/Protected Waterway(s)/Environmentally Sensitive Area (A): **Lavaca River, Cox Bay, Lavaca Bay and Gulf of Mexico**

Distance from Facility: **1/4 mile**

Response Contractor(s): **Oil Mop**

Yes	No	
	X	Standard Response Plan Cover Sheet Submitted with Plan.
	X	Emergency Response Action Plan Submitted with Plan or as Separate Part of Plan.
X		Facility Response Plan Follows 40 CFR 112 Appendix F Format.

III. FRP Applicability [40 CFR 112.20 (f)(1)]			
X	The facility transfers oil over water to or from vessels and has a total oil storage capacity greater or equal to 42,000 gallons.		
	-OR-		
	The facility's total oil storage is greater than or equal to 1 million gallons, and one of the following is true:		
	The facility does not have secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground oil storage tank within each storage area plus sufficient freeboard to allow for precipitation.		
X	The facility is located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments.		
	The facility is located at a distance such that a discharge from the facility would shut down a public drinking water intake.		
	The facility has had a reportable spill in an amount greater than or equal to 10,000 gallons with in the last 5 years.		
	Substantial Harm Facility	x	Significant and Substantial Harm Facility

NOTE: The plan appears to be missing a standard Response Plan Cover Sheet. Also, the plan does not appear to contain an ERAP. The ERAP is supposed to be a separate plan, or the first tab in the FRP. The body of the FRP is designed to be the planning portion of the response plan. The ERAP is a separate/condensed document that is used as the implementation plan used by the QI/FOSC during an actual incident.
The plan has a limited cross reference. Since the plan is supposed to include all of the core elements from Appendix F, the cross reference should include all of the line items from Appendix F and exactly where they can be located in the ICP. The ICP is very difficult to navigate and since the cross reference does not include all of the required items it is not easy to find the necessary information. The FRP is supposed to be set up in such a way that the facility and the Federal On Scene Coordinator can easily find the necessary information during an emergency. At a minimum the plan needs to be updated to include a detailed Cross Reference that includes all of the line items from Appendix F and exactly where they can located in the ICP so it can be easily navigated by all parties.

Facility Response Plan
Plan Review Checklist
For Verifying Compliance with Facility Response Plan Requirements

Activity Information		
Activity Type		FRP Plan Review
Reason for Review	X	Initial Plan Submittal (new FRP)
		5-year Review
		Plan Amendment (note type)
	X	Other (note other reason)
		Note: Approval and Inspection
Activity Date		3/14/2023
EPA Inspector		Chris Perry
Plan Version Reviewed		Initial review 2/11/2021; Follow up review August 31, 2022

112.20(h)(11)	**A. Response Plan Cover Sheet (sec. 2.0)**	YES	NO	N/A
	General Information (sec 2.1)			
	Facility name		X	
	Facility address		X	
	Facility telephone number		X	
	Mailing address (if different from facility address)		X	
	Facility owner/operator and address **(recommended)**		X	
	Facility owner telephone **(recommended)**		X	
	Dun & Bradstreet number		X	
	Longitude (degrees, minutes, seconds)		X	
	Latitude (degree, minutes, seconds)		X	
	North American Industrial Classification System (NAICS) code		X	
	Facility start up date **(recommended)**		X	
	Facility acres **(recommended)**		X	
	Name of affected/protected waterway or environmentally sensitive area		X	
	Distance to navigable water		X	
	Worst case discharge amount (gallons)		X	
	Maximum oil storage capacity (gallons)		X	
	Largest aboveground storage tank (AST) capacity (gallons)		X	
	Total number of ASTs		X	
	Total number of underground storage tanks (USTs)		X	
	Total UST storage		X	
	Total storage of drums and transformers that contain oil		X	
	Number of surface impoundments and total storage of surface impoundments		X	
	Applicability of Substantial Harm Criteria (sec.2.2)			
	Attachment C-1 with answer to each applicability question	X		
	Documentation of reliability and analytical soundness of alternate formula			X
	Certification (sec. 2.3)			
	Plan holder certification is included (contains signature, title, and date)	X		
	Verification of Contract (sec. 2.4)			
	Plan holder certification is included (contains signature, title, and date)	X		

Notes: Plan is missing a Response Plan Cover Sheet. The cross reference lists multiple locations to find the required information. The Cover Sheet is required to be a separate sheet with all of the above information so the agency can easily update their records as to the information for each facility.

112.20(h)(1)	**B. Emergency Response Action Plan (ERAP) (sec. 1.1)**	YES	NO	N/A
112.20(h)(1)	Separate Section of FRP		X	
112,20(h)(1)(i),	Qualified Individual (QI) Information (sec. 1.2)		X	
112,20(h)(1)(ii), 112.20(h)(3)(iii)	Emergency Notification List (sec. 1.3.1)		X	
	Spill Response Notification Form (sec. 1.3.1)		X	
112.20(h)(1)(iv)	Response Equipment List and Location (sec. 1.3.2)		X	
112.20(h)(1)(iv)	Response Equipment Testing and Deployment (sec. 1.3.3)		X	
112.20(h)(1)(v)	Facility Response Team List (sec. 1.3.4)		X	
112.20(h)(1)(vi)	Evacuation Plan (sec. 1.3.5)		X	
112.20(h)(1)(vii)	Immediate Actions (sec. 1.7.1)		X	
112.20(h)(1)(viii)	Facility Diagrams (sec. 1.9)		X	
	***The sections above should be extracted from the more detailed corresponding sections of the plan.**			

Notes: The plan does not appear to contain an ERAP. The ERAP is supposed to be a separate plan, or the first tab in the FRP. The body of the FRP is designed to be the planning portion of the response plan. The ERAP is a separate/condensed document that is used as the implementation plan used by the QI/FOSC during an actual incident.

112.20(h)(2)	**C. Facility Information (sec. 1.2)**	YES	NO	N/A
	Facility name (sec. 1.2.1)	X		
	Street address	X		
	City, state, zip code	X		
	County	X		
	Phone number	X		
	Latitude/longitude (sec. 1.2.2)	X		
	Wellhead protection area (sec. 1.2.3)			X
	Owner/operator (both names included, if different) (sec. 1.2.4)	X		
	QI Information (sec. 1.2.5)	X		
	-Name, position, phone numbers	X		
	- Description of specific response training experience		X	
	Oil storage start-up date (sec. 1.2.6)	X		
	Facility operations description (sec. 1.2.7)	X		
	North American Industrial Classification System (NAICS) or Standard Industrial Classification code (SIC)	X		
	Dates and types of substantial expansion (sec. 1.2.8)	X		

Notes: The ICP does not appear to contain the specific response training that each of the facility QIs have taken. The facility section of the plan states the Hydrocarbons portion of the facility fall under NAICS 211112, but that is for oil production and it would not be the correct NAICS for the facility.

112.20(h)(1) and (3)	**D. Emergency Response Information (sec. 1.3)**	YES	NO	N/A
	Notification (sec. 1.3.1)			
	Emergency Notification Phone List			
	National Response Center phone number	X		
112.20(h)(1)(i)	QI (day and evening) phone numbers		X	
	Company response team (day and evening) phone numbers	X		
	Federal On-Scene Coordinator (OSC) and/or Regional Response Center (day and evening) phone numbers	X		
	Local response team phone numbers (fire department/cooperatives)		X	
	Fire marshal (day and evening) phone numbers		X	
	State emergency response phone number(s)	X		
	State Police phone number		X	
	State Emergency Response Commission (SERC) phone number		X	
	Local emergency planning committee (LEPC) phone number	X		
	Wastewater treatment facility(s) name and phone number (**recommended**)		X	
	Local water supply system (day and evening) phone numbers		X	
	Weather report phone number		X	
	Local television/radio phone number(s) for evacuation notification		X	
112.20(h)(3)(i)	Spill response contractor(s)		X	
	Factories/Utilities with water intakes (**recommended**)		X	
	Trustees of sensitive areas (**recommended**)	X		
	Hospital phone number		X	
	Spill Response Notification Form			
	Reporter's name, position and phone number		X	
	Company information		X	
	Incident description (source/cause)		X	
	Material (were materials discharged?)		X	
	Response action (meeting federal obligations to report, calling for responsible party, time called)		X	
	Impact		X	
	Date/time of incident, incident address/location, nearest city/state/county/zip code, distance from city/units of measure/direction from city, township, range, borough, container type/tank oil storage capacity		X	
	Units of measure, facility oil storage capacity/units of measure, facility longitude and latitude		X	

Notes: Under 40 CFR 112 App F, Section 1.3.1, the regulation states the FRP needs to provide an Emergency Notification Phone List that includes all of the above numbers (in the above order) to be called "immediately" in the event of an emergency. The plan does have a list with some of the numbers in Section 4.13, but it is not included in the cross reference. The referenced sections of the plan were missing the above numbers. Also, the submitted plan has a list of numbers that are hard to read because it is not clear, and there is a bold watermark over the page. The numbers need to be clear to read so the facility and EPA have the necessary numbers during an emergency. Finally, after searching through the plan it appears the plan does not include a blank Spill Response Notification Form with the above line items so the blank form can be filled out and utilized when notifying the NRC and all the above numbers.

112.20(h)(1)(iv), 112.20(h)(3)(vi)	**Response Equipment (sec 1.3.2)**			
	Equipment Information			
	Equipment list	x		
	Equipment location	x		
	Release handling capabilities and limitations (e.g., launching sites)		**X**	
Notes: The plan does not appear to have predetermined launching sites for the equipment as required in Appendix F. The plan should include the necessary boat launches and any predetermined boom launching sites so the QI and FOSC know where to coordinate the launching of the response equipment during an emergency at the facility.				

112.20(h)(3)(vi)	**E. Response Equipment List (Identify if Facility, OSRO, CO-OP owned by letters O, F, or C) (sec. 1.3.2)**	YES	**NO**	N/A
	Skimmers/pumps (operational status, type/model/year, number or quantity, capacity, daily effective recovery rate, storage location)	O		
	Boom (containment boom: operational status, year, number, skirt size)	O		
Socks and Pads	Boom (sorbent boom: operational status, type/model/year, number, size (length))	F		
	Chemical countermeasure agents stored	O		
	Sorbents (type, year purchased, amount, storage location)	F		
	Hand tools (type, quantity, storage location)	O		
	Communications equipment (operational status, type and year, quantity, storage location)	F		
AFFF-6,625 gal	Fire Fighting and Personnel Protective Equipment	F		
	Boats and Motors (operational status, type, and year, quantity, storage location)	O		
Backhoe, Dozer, Dump Truck, Track Hoe	Other (e.g., heavy equipment, cranes, dozers, etc.) (operational status, type and year, quantity, storage location)	F		
	Equipment Location	x		
	Amount of oil that emergency response equipment can handle and limitations (e.g., launching sites) must be described.	x		
Notes:				

112.20(h)(8)(i) and (ii)	**F. Response Equipment Testing and Deployment Drill Log (sec. 1.3.3)**	YES	**NO**	N/A
	Date of last inspection or equipment test		**X**	
	Inspection Frequency		**X**	
	Date of Last Deployment		**X**	
	Deployment Frequency		**X**	
	OSRO Certification (Note: Facilities without facility owned response equipment must ensure that the Oil Spill Removal Organization that is identified in the response plan to provide this response equipment certifies that the deployment exercises have been met)		**X**	
Notes: A blank Response Equipment Drill Log was not found in the plan or referenced in the cross reference. The referenced section of the plan was missing a discussion explaining the facility will ensure that the OSRO certifies that their deployment exercises have been met on an Annual basis.				

	G. Personnel (sec. 1.3.4)	YES	NO	N/A
112.20(h)(3)(v), 112.20(h)(1)(v)	**Emergency Response Personnel Information** (Personnel whose duties involve responding to emergencies, including oil discharges, even when they are not present at the site)			
	Response personnel name(s)	X		
	Facility response team title/position	X		
	Response personnel phone numbers (work/home, other)	X		
	Response personnel response time		X	
	Response personnel responsibility	X		
	Response personnel training (type and date)		X	
112.20(h)(3)(i)	**Emergency Response Contractor Information**			
	Response contractor name (s)	X		
	Response contractor phone numbers	X		
	Response contractor response time	X		
112.20(h)(3)(ii)	Response contractor evidence of contractual arrangements	X		
	Facility Response Team Information (Composed of Emergency Response Personnel and Emergency Response that will respond immediately)			
	Response team member name(s)		X	
	Response team member job function		X	
	Response team member response time		X	
	Response team member phone/pager number		X	
	Name of emergency response contractor (contractors providing facility response team services may be different than contractors providing oil spill response services)	X		
	- Response time	X		
	- Phone/pager	X		

Notes: The plan included a list of the shift supervisors and management staff. The plan was missing the training, responsibilities and response times for those personnel. The plan should also include a full list of personnel at the facility that can/will be utilized to respond to an emergency and deploy the facility response equipment. The list should include a full list of those personnel so the QI and FOSC knows who all is available during the response. Each person is required to have the above information including a response time in case they are not on site and need to be called in.

112.20(h)(1)(vi), 112.20(h)(3)(vii)	**H. Evacuation Plans (sec. 1.3.5)**	YES	NO	N/A
	Facility Evacuation Plan (sec. 1.3.5.1)			
	Location of stored materials		X	
	Hazard imposed by spilled materials		X	
	Spill flow direction		X	
	Prevailing wind directions and speed		X	
	Water currents, tides, or wave conditions (if applicable)		X	
	Arrival route of emergency response personnel and response equipment		X	
	Evacuation routes		X	
	Alternative routes of evacuation		X	
	Transportation of injured personnel to nearest emergency medical facility		X	
	Location of alarm/notification systems		X	
	Centralized check-in area for roll call		X	
	Mitigation command center location		X	
	Location of shelter at facility		X	
112.20(h)(3)(vii), 112.20(h)(1)(vi)	Community Evacuation Plans referenced (sec. 1.3.5.3)		X	

Notes: The plan has multiple diagrams listed as evacuation maps and refers to a Unit Specific Evacuation Plan, but there was no actual Evacuation Plan built off of the above details found in the plan during the review.

112.20(h)(3)(ix)	**I. Qualified Individual's Duties (sec. 1.3.6)**	YES	NO	N/A
112.20(h)(3)(ix)(A)	Activate internal alarms and hazard communication systems		X	
112.20(h)(3)(ix)(B)	Notify Response Personnel		X	
112.20(h)(3)(ix)(C)	Identify character, exact source, amount, and extent of the release		X	
112.20(h)(3)(ix)(D)	Notify and provide information to appropriate Federal, State and local authorities		X	
112.20(h)(3)(ix)(E)	Assess interaction of spilled substance with water and/or other substances stored at facility and notify on-scene response personnel of assessment		X	
112.20(h)(3)(ix)(F)	Assess possible hazards to human health and the environment		X	
112.20(h)(3)(ix)(G)	Assess and implement prompt removal actions		X	
112.20(h)(3)(ix)(H)	Coordinate rescue and response actions		X	
112.20(h)(3)(ix)(I)	Access company funding to initiate cleanup activities		X	
112.20(h)(3)(ix)(J)	Direct cleanup activities		X	

Notes: The above required Qualified Individual's Duties were not found in the ICP.

112.20(h)(4)	**J. Hazard Evaluation (sec. 1.4)** *(See Section II, Appendix A)*	YES	NO	N/A
	Hazard Identification (sec. 1.4.1)			
	Tank Above Ground and Below Ground			
	Tanks (List Tanks by Number, Product and Shell Capacity in the space below)			
	Tank number(s)		X	
	Substance(s) stored		X	
	Quantity(s) stored		X	
	Tank type(s)/year(s) of construction		X	
	Shell capacity(s)		X	
	Failure(s)/cause(s)		X	
	Surface Impoundments (SI)			
	SI Number(s)			X
	Substance(s) Stored			X
	Quantity(s) Stored			X
	Surface area(s)/year(s) of construction			X
	Maximum capacity(s)			X
	Failure(s)/cause(s)			X
	Labeled schematic drawing	X		
	Description of transfers (loading and unloading) and volume of material		X	
	Description of daily operations	X		
	Secondary containment volume(s)		X	
	Normal daily throughput of the facility		X	

Notes: The submitted ICP was missing a tank chart that includes all of the information for the ASTs that are located at the facility. A detailed description of the different types of transfers was not found in the plan. The volumes of the multiple secondary containment areas was not found in the ICP in the referenced sections. Finally the normal daily throughput was not found in the plan.

112.20(h)(4)	**K. Vulnerability Analysis (sec. 1.4.2)** (See Appendix A - Calculation of the Planning Distance)	YES	NO	N/A
Planning Distance = ? miles	Analysis of potential effects of an oil spill on vulnerable areas. (Attachment C-III to Appendix C to this part provides a method that owners or operators shall use to determine appropriate distances from the facility to fish and wildlife and sensitive environments. Owners or operators can use a comparable formula that is considered acceptable by the Regional Administrator (RA). If a comparable formula is used, documentation of the reliability and analytical soundness of the formula must be attached to the Response Plan Cover Sheet.)			
	Water intakes (drinking, cooling or other)		X	
	Schools		X	
	Medical facilities		X	
	Residential areas		X	
	Businesses		X	
	Wetlands or other sensitive environments		X	
	Fish and wildlife		X	
	Lakes and streams		X	
	Endangered flora and fauna		X	
	Recreational areas		X	
	Transportation routes (air, land, and water)		X	
	Utilities		X	
	Other applicable areas of economic importance (list below)		X	

Notes: Section III Annex 3 6.2 of the ICP states that "FPC-TX maintains a sperate document to comply with this section which is the FPC-TX Marine Traffic Facility Response Plan. The planning distance calculation should be one of the first things that is done when starting the FRP as it shows how far a spill can travel. Once the calculation has been conducted then a full Vulnerability Analysis is required to be conducted, and a full list of the above items and their locations along the spill pathway are required to be in the FRP per 40 CFR 112. This cannot be referenced to a separate plan and it should be in this ICP.

112.20(h)(4)	**L. Analysis of the Potential for an Oil Spill (sec. 1.4.3)**	YES	NO	N/A
	Description of likelihood of release occurring	X		
	Oil spill history for the life of the facility	X		
	Horizontal range of potential spill	X		
	Vulnerability to natural disaster	X		
	Tank age	X		
	Other factors (e.g., unstable soils, earthquake zones, Karst topography, etc.)	X		

Notes:

112.20(h)(4)	**M. Facility Reportable Oil Spill History Description (sec. 1.4.4)**	YES	NO	N/A
	Date of discharge(s)		X	
	List of discharge causes		X	
	Material(s) discharged		X	
	Amount of discharges (gallons)		X	
	Amount that reached navigable waters (if applicable)		X	
	Effectiveness and capacity of secondary containment		X	
	Clean-up actions taken		X	
	Steps taken to reduce possibility of recurrence		X	
	Total oil storage capacity of tank(s) or impoundment(s) from which material discharged		X	
	Enforcement actions		X	
	Effectiveness of monitoring equipment		X	
	Description(s) of how each oil discharge was detected		X	

Notes: The Oil Spill History was referenced to be in APP A of the SPCC plan. The submitted plan does not contain a copy of the SPCC plan and only the title page. The FRP should at a minimum contain a list of the above items so the facility knows what information is necessary tobe maintained in case they have a spill. The entire history does not need to be maintained in the plan itself.

	N. Discharge Scenarios (sec. 1.5)	YES	NO	N/A
	Small Discharges (sec. 1.5.1) (Description of small discharges addressing facility operations and components including but not limited to (see. 1.5.1.1):			
	Loading and unloading operations		X	
	Facility maintenance operation		X	
	Facility piping		X	
	Pumping stations and sumps		X	
	Oil storage location		X	
	Vehicle refueling operations		X	
	Age and condition of facility components		X	
	Small volume discharge calculation for a facility	X		
	Facility-specific spill potential analysis	X		
	Average most probable discharge for complexes	X		
	1,000 feet of boom (1 hour deployment time)	X		
	Correct amount of boom for complexes	X		
	Oil recovery devices equal to small discharge (2 hour recovery time)	X		
	Oil storage capacity for recovered material	X		

	Scenarios Affected by the Response Efforts (sec. 1.5.1.2)			
	Size of the discharge		X	
	Proximity to down gradient wells, waterways, and drinking water intakes		X	
	Proximity to fish and wildlife and sensitive environments		X	
	Likelihood that the discharge will travel offsite (i.e., topography, drainage)		X	
	Location of the material discharged (i.e., on a concrete pad or directly on the soil)		X	
	Material discharged		X	
	Weather or aquatic conditions (i.e., river flow)		X	
	Available remediation equipment		X	
	Probability of a chain reaction of failures		X	
	Direction of discharge pathway		X	
	Medium Discharges (sec. 1.5.1) (Description of medium discharges scenarios addressing facility operations and components including but not limited to (sec. 1.5.1.1):			
	Loading and unloading operations		X	
	Facility maintenance operation		X	
	Facility piping		X	
	Pumping stations and sumps		X	
	Oil storage location		X	
	Vehicle refueling operations		X	
	Age and condition of facility components		X	
	Medium volume discharge calculation for a facility	X		
	Facility-specific spill potential analysis	X		
	Maximum most probably discharge for complexes	X		
	Oil recovery devices equal to medium discharge	X		
	Availability of sufficient quantity of boom	X		
	Oil storage capacity for recovered material	X		
	Scenarios Affected by the Response Efforts (sec. 1.5.1.2)			
	Size of the discharge		X	
	Proximity to down gradient wells, waterways, and drinking water intakes		X	
	Proximity to fish and wildlife and sensitive environments		X	
	Likelihood that the discharge will travel offsite (i.e., topography, drainage)		X	
	Location of the material discharged (i.e., on a concrete pad or directly on the soil)		X	
	Material discharged		X	
	Weather or aquatic conditions (i.e., river flow)		X	
	Available remediation equipment		X	
	Probability of a chain reaction of failures		X	
	Direction of discharge pathway		X	

Notes: The plan did not include actual discharge scenarios. There were discussions in Section III Annex 3 6.0 of what could cause a spill and what to do if one occurs, but the plan is required to have actual training scenarios. The plan should include actual training scenarios that explain where the spill occurs, what is spilled, how it gets out of containment, what the pathway is to the water, and what the weather and water conditions are at the time of the spill. These scenarios should be detailed enough to be utilized during training and the facility PREP exercises.

112.20(h)(5)(i)	**O. Worst Case Discharge (sec. 1.5.2)** (See Appendix A) (When planning for the worst case discharge response all of the factors listed in the small and medium discharge section of the response plan shall be addressed)	YES	NO	N/A
	Facility Specific Worst Case Discharge Scenario		X	
	Description of worst case discharges scenarios addressing facility operations and components including but not limited to (sec. 1.5.1.1):			
	Loading and unloading operations			X
	Facility Maintenance Operation			X
	Facility Piping			X
	Pumping stations and sumps			X
	Oil storage location	X		
	Vehicle refueling operations			X
	Age and condition of facility components			X
112 Appendix D	Correct Worst Case Discharge (WCD) calculation for specific type of facility		X	
	Correct WCD calculation for complexes		X	
112 Appendix E	Sufficient response resources for WCD	X		
	Sources and quantity of equipment for response to WCD	X		
	Oil storage capacity for recovered material	X		
	Scenarios Affected by the Response Efforts (sec. 1.5.1.2)			
	Size of the discharge		X	
	Proximity to down gradient wells, waterways, and drinking water intakes		X	
	Proximity to fish and wildlife and sensitive environments		X	
	Likelihood that the discharge will travel offsite (i.e., topography, drainage)		X	
	Location of the material discharged (i.e., on a concrete pad or directly on the soil)		X	
	Material discharged		X	
	Weather or aquatic conditions (i.e., river flow)		X	
	Available remediation equipment		X	
	Probability of a chain reaction of failures		X	
	Direction of discharge pathway		X	

Notes: The plan did not include actual discharge scenarios. There were discussions in Section III Annex 3 6.0 of what could cause a spill and what to do if one occurs, but the plan is required to have actual training scenarios. The plan should include actual training scenarios that explain where the spill occurs, what is spilled, how it gets out of containment, what the pathway is to the water, and what the weather and water conditions are at the time of the spill. The scenarios should be detailed enough to be utilized during training and the facility PREP exercises. The plan does not appear to be utilizing the correct WCD calculation. There should be an Appendix E-1 form for each type of oil, and then the WCD is based off of those. It should come to the capacity of the largest tank per Appendix D as long as the other tanks have sized secondary containment.

112.20(h)(6)	**P. Discharge Detection Systems (sec. 1.6)**	YES	NO	N/A
	Discharge Detection by Personnel (sec. 1.6.1)			
	Description of procedures and personnel for spill detection		X	
	Description of facility inspections		X	
	Description of initial response actions		X	
	Emergency Response Information (referenced)		X	
Notes: The above details were not found in the referenced sections of the plan. The inspections that are referenced above are the daily rounds that are used to identify leaks throughout the normal shift work. These inspections need to be explained along with the initial actions to take if a leak is identified.				
Section II, 112.7(e)(5)(iii)(D), 112.7(e)(5(iii), 112.7(e)(2)(viii), 112.7(e)(7)(v), Appendix A	**Automated Discharge Detection (sec. 1.6.2)**			
	Description of automatic spill detection equipment, including overfill alarms and secondary containment sensors		X	
	Description of alarm verification procedures and subsequent actions		X	
	Initial response actions		X	
Notes: In multiple sections of the plan it states that there are alarms and procedures for the operator to take in case of an unforeseen accident. The plan does not appear to have those procedures included in the sections that were referenced. Also, the plan should explain what specific types of automated discharge detection is present on the tanks and equipment.				

112.20(h)(7), Appendix E	**Q. Plan Implementation (sec. 1.7)**	YES	NO	N/A
	Identification of response resources for small, medium, and worst case spills (sec. 1.7.1)			
	Description of response actions		x	
	Accessibility of proper response personnel and equipment	X		
	Emergency plans for spill response	X		
	Additional response training	X		
	Additional contracted help	X		
	Access to additional response equipment/experts		x	
	Ability to implement plan, including response training and practice drills		x	
	Temporary storage		x	
	Recommended form detailing immediate action for small, medium and Worst Case spills (sec. 1.7.1.2A) (stop the product flow, warn personnel, shut off ignition sources, initiate containment, notify NRC, notify OSC, notify (as appropriate))		x	
Notes: The above information was not found in the referenced sections of the plan. One of the most important things that is not covered in another section is Temporary Storage. The plan should discuss in detail the facility's options they will use to store recovered material until it can be disposed.				
	Disposal Plan (sec. 1.7.2)			
	Description of procedures for recovering, reusing, decontaminating or disposing of materials	X		
	Materials addressed in Disposal Plan (recovered product, contaminated soil, contaminated equipment and materials (including drums tank parts, valves and shovels), personnel protective equipment, decontamination solutions, absorbents, spent chemicals)	X		
	Plan prepared in accordance with any federal, state, and/or local regulations	X		
	Plan addresses permits required to transport or dispose of recovered materials	X		
Notes:				
Section II, 112.7(e)(1), 112.7(e)(7), Appendix A	**Containment and Drainage Planning (sec. 1.7.3)**			
	Description of containing/controlling a spill through drainage	X		
	Containment and drainage plan available	X		
	Available volume of containment	X		
	Drainage route from oil storage and transfer areas	X		
	Construction materials used in drainage troughs	X		
	Type and number of valves and separators in drainage system	X		
	Sump pump capacities	X		
	Containment capacities of weirs and booms and their location	X		
	Other cleanup materials	X		
Notes:				

	R. Self-Inspection, Training, and Meeting Logs (sec. 1.8)	YES	NO	N/A
	Facility Self-Inspection (sec. 1.8.1)			
Section II, 112.7(e)(8)	Records of tank inspections with dates (tank leaks, tank foundations, tank Piping) contained or cross-referenced in Plan or maintained electronically for five years	X		
Section II, 112.7(e)(8)	Records of secondary containment inspections with dates (dike or berm system, secondary containment, retention and drainage ponds) contained or cross-referenced in Plan or maintained electronically for five years	X		
112.20(h)(8)(i)	Response equipment inspection			
	Response equipment checklist (sec. 1.8.1.2)		X	
	Equipment inventory (item and quantity)		X	
	Storage location (time to access and respond)		X	
	Accessibility (time to access and respond)		X	
	Operational status/condition		X	
	Actual use/testing (last test date and frequency of testing)		X	
	Shelf life (present age, expected replacement date)		X	
	- Inspection date		X	
	- Inspector's signature		X	
	- Inspection records maintained for 5 years		X	
	- Response equipment inspection log (inspector, date, comments)		X	
Notes: A blank Response Equipment checklist was not found in the submitted plan.				
	Facility Drills/Exercises (sec. 1.8.2)			
	Description of drill/exercise program based on National Preparedness for Response Exercise Program (PREP) guidelines or other comparable program			X
	- If "no" alternative program has been approved by EPA RA (describe program below)		X	
	QI notification drill **(Quarterly)**		X	
	Spill management team tabletop exercise **(Annual)**		X	
	Equipment deployment exercise **(Semi-Annual)**		X	
	Unannounced exercise **(Annual)**		X	
	Area exercise		X	
	Description of evaluation procedures for drill program		X	
	Qualified Individual notification drill log (sec. 1.8.2.1)			
	Date, company, qualified individual, other contacted, emergency scenario, evaluation		X	
	Spill management team tabletop drill log (sec. 1.8.2.2)			
	Date, company, QI, participants, emergency scenario, evaluation, changes to be implemented, time table for implementation		X	
Notes: Annex 5 Section 1.0 states the facility has not adopted PREP and has developed their own program. The section further states the facility will conduct an annual emergency exercise. There is no other real information included about the facility drills. If the facility is proposing to follow an alternative program, they will need to prepare and submit a full program for approval by the EPA Region 6 RA. If the program is one drill it will not be comparable to PREP. Since the facility is a complex facility with the USCG, if they have approval for an alternative program a copy of that approval is requested also so it can be taken into account during the approval by the EPA. Also, the plan should contain a blank copy of the drill logs that will be filled out when conducting the facility drills.				

	Response Training (sec. 1.8.3)			
	Description of response training program (including topics)	X		
	Personnel response training logs (name, response training date/and number of hours, prevention training date/and number of hours)		X	
	Discharge prevention meeting logs (date, attendees)		X	
Notes: The plan was missing blank training logs				

	S. Diagrams (sec. 1.9)	YES	NO	N/A
	Site Plan Diagram			
	Entire facility to scale		X	
	Above and below-ground storage tanks		X	
	Contents and capacities of bulk oil storage tanks		X	
	Contents and capacities of drum storage areas		X	
	Contents and capacities of surface impoundments		X	
	Process buildings		X	
	Transfer areas		X	
	Location and capacity of secondary containment systems		X	
	Location of hazardous materials		X	
	Location of communications and emergency response equipment		X	
	Location of electrical equipment that might contain oil		X	
	If the facility is a complex facility, the interface between EPA and other regulating agencies		X	
Notes: The submitted ICP had multiple aerial maps of the facility, but it contained no actual diagrams that include the above information as required under Appendix F.				
	Site Drainage Plan Diagram			
	Major sanitary and storm sewers, manholes, and drains		X	
	Weirs and shut-off valves		X	
	Surface water receiving streams		X	
	Fire fighting water sources		X	
	Other utilities		X	
	Direction of spill flow from discharge points		X	
Notes: The submitted ICP had multiple aerial maps of the facility, but it contained no actual diagrams that include the above information as required under Appendix F.				
	Site Evacuation Plan Diagram			
	Site plan diagram with evacuation routes		X	
	Location of evacuation regrouping areas		X	
	Response personnel ingress and egress		X	
	Response equipment transportation routes		X	
Notes: The Evacuation Maps only indicate the Gates that can be used for evacuation. The diagrams are missing all of the above required information for each of the areas at the facility.				

Section II, 112.7(e)(9)	**T. Site Security (sec. 1.10)**	YES	**NO**	N/A
	• Description of facility security		**X**	
	(Emergency cut-off locations, enclosures, guards and their duties, lighting, valve and pump locks, pipeline connection caps)			
Notes: The Site Security Section of the plan had numerous discussions of alarm systems, but it was missing a detailed discussion of the above required information.				

Please use the following space to describe overall impressions of the facility response plan (i.e., functional, workable). A set of questions is provided in Appendix C to assist the inspector is assessing overall Plan adequacy.	
Reviewed by:	Chris Perry
Date:	initial plan review 3/2/2021; updated plan reviewed 03/01/2023

Facility Response Plan Field Inspection Checklist

Activity Information	
Activity Type	**FRP Field Inspection**
Activity Date	**3/14/2023**
EPA Inspector	**Chris Perry**

Facility Information								
Facility ID: **R6-TX-00580**	FRP Harm Category?		Substantial Harm					
		X	Significant & Substantial Harm					
FRP ID:	Complex?	X	Yes		No			
FRP-06-TX-00580	If Complex, Shared Jurisdiction?	X	Yes		No		N/A	
Facility Name:	**Formosa Plastics Corporation, Texas**							
Address:	201 Formosa Drive							
City:	Point Comfort							
State:	TX						Zip: 77978	
Owner/Operator:	**Formosa Plastics Corporation, LP**							
FRP Contact:	Paul (JP) Murry - Emergency Response Coordinator							
Telephone:	361-987-7140							
Email:	J.P.M@ftpc.fpcusa.com							
QI:	Bobby Sparkman							
Telephone:	361-987-7187							
Email:	bsparkman@ftpc.fpcusa.com							
Notes/Comments: (Include County name)								

112.20(h), 112 Appendix F Section 1.0	A. General	YES	NO	N/A
112 Appendix F Section 1.0	Copy of FRP is available at the facility	X		
112.20(h)(1), 112 Appendix F Section 1.1	Copy of Emergency Response Action Plan is available at the facility.		X	
112.20(h)(1)(vi), 112.20(h)(3)(vii), 112 Appendix F Section 1.3.5	Evacuation plan is readily available.		X	
Describe how the facility incorporates the FRP into its overall training program:				
Notes: The facility is missing a ERAP with the required information.				

112.20(h), 112 Appendix F Section 1.3.1	**B. Spill Notification**	**YES**	**NO**	**N/A**
112,20(h)(1)(ii), 112.20(h)(3)(iii), 112 Appendix F Section 1.3.1	Spill notification call-down list contains correct telephone numbers.	X		
112,20(h)(1)(ii), 112.20(h)(3)(iii), 112 Appendix F Section 1.3.1	Emergency contact information has been verified as current.	X		
Notes				

112.20(h)(4), 112 Appendix F Section 1.4	**C. Hazard Evaluation**	**YES**	**NO**	**N/A**
112 Appendix F Section 1.4.1	Facility total storage capacity corresponds to storage capacity reported in the plan	X		
112 Appendix F Section 1.4.1	Secondary containment is adequate for all aboveground tanks	X		
112 Appendix F Sections 1.4.2 and 1.4.3	Following factors affecting response efforts are properly addressed / characterized:	X		
	- Discharge volume	X		
	- Proximity to down gradient water	X		
	- Proximity to fish and wildlife and sensitive environments	X		
	- Proximity to drinking water intakes	X		
	- Likelihood that discharge will travel offsite	X		
	- Location of material spilled (i.e., on concrete pad or soil)	X		
	- Type of material discharged	X		
	- Weather or aquatic conditions anticipated during adverse conditions	X		
	- Available remediation equipment	X		
	- Probability of chain reaction or failures	X		
	- Direction of spill	X		
112 Appendix F Section 1.4.4	History of all reportable discharges at the facility is maintained with the FRP	X		
Notes				

112 Appendix F Section 1.5	D. Discharge Scenarios	YES	NO	N/A
112.20(h)(5)(i), 112 Appendix F Section 1.5.2	Worst-case discharge scenario described in Plan is accurate (e.g., source and impacts)	X		
112 Appendix F Section 1.5.1	Medium discharge scenario described in Plan is accurate (e.g., source and impacts)	X		
112 Appendix F Section 1.5.1	Small discharge scenario described in Plan is accurate (e.g., source and impacts)	X		
Notes				

112.20(h)(1) and (h)(3)(ix), 112 Appendix F Sections 1.3.6 and 1.6	E. Response Personnel	YES	NO	N/A
112.20(h)(1)(i), 112 Appendix F Section 1.2	Qualified Individual (QI) information (name, title, telephone numbers) is current	X		
112.20(h)(3)(ix), 112 Appendix F Section 1.3.6	QI is aware of, and prepared to fulfill, responsibilities:	X		
112.20(h)(3)(ix)(A), 112 Appendix F Section 1.3.6	- Activate internal alarms and hazard communication systems	X		
112.20(h)(3)(ix)(B), 112 Appendix F Section 1.3.6	- Notify response personnel	X		
112.20(h)(3)(ix)(C), 112 Appendix F Section 1.3.6	- Identify character, exact source, amount, and extent of the release	X		
112.20(h)(3)(ix)(D), 112 Appendix F Section 1.3.6	- Notify and provide information to appropriate Federal, State, and local authorities	X		
112.20(h)(3)(ix)(E), 112 Appendix F Section 1.3.6	- Assess interaction of substances with water and/or other substances stored at facility and notify on-scene response personnel of assessment	X		
112.20(h)(3)(ix)(F), 112 Appendix F Section 1.3.6	- Assess possible hazards to human health and the environment	X		
112.20(h)(3)(ix)(G), 112 Appendix F Section 1.3.6	- Assess and implement prompt removal actions	X		
112.20(h)(3)(ix)(H), 112 Appendix F Section 1.3.6	- Coordinate rescue and response actions	X		
112.20(h)(3)(ix)(I), 112 Appendix F Section 1.3.6	- Access company funding to initiate cleanup activities	X		
112.20(h)(3)(ix)(J), 112 Appendix F Section 1.3.6	- Direct cleanup activities	X		

112 Appendix F Section 1.2	QI has specific response training experience	X		
112 Appendix F Section 1.6	Facility personnel are familiar with procedures for detecting a discharge	X		
Notes				

112.20, 112 Appendices E and F	**F. Response Equipment**	**YES**	**NO**	**N/A**
112 Appendix E Section 3.0	Required response resources for a small discharge are provided.	X		
112 Appendix E Section 3.3.1	- 1,000 ft. of boom and, if marine transfer facility, boom equal to twice the length of largest vessel	X		
112 Appendix E Section 3.3.1	- Capacity of deploying boom within 1 hour of small discharge	X		
112 Appendix E Section 3.3.2	- Response equipment capable of being deployed within 2 hours of a small discharge	X		
112 Appendix E Section 3.3.2	- Response equipment daily recovery capacity equal to the total volume of small discharge	X		
112 Appendix E Section 12.2	- Temporary storage capacity equal to twice the volume of the small discharge	X		
112 Appendix E Section 4.0	Required response resources for a medium discharge are provided:	X		
112 Appendix E Section 4.5	- Sufficient quantities of boom for containment and collection and for protection	X		
112 Appendix E Section 4.4	- Response equipment daily recovery capacity equal to 50% of total volume of small discharge	X		
112.20(h)(3)(ii), 112 Appendix F Section 1.3.4	Facility has current signed contract with response contractor and/or membership in cleanup co-op.	X		
	- If YES, facility has evidence of contractor's equipment deployment exercises (annually)	X		
112.20, 112 Appendix F	Facility has its own response equipment.	X		
112.20(h)(8)(i) and (ii), 112 Appendix F Section 1.3.3, 112 Appendix F Section 1.8.1.2	- If YES, facility response equipment is regularly inspected (check logs)	X		
112 Appendix F Section 1.3.2	Following equipment is provided and, if so, is operational, accessible, and has adequate capacity:	X		
112 Appendix F Section 1.3.2(1)	- Skimmers			X
112 Appendix F Section 1.3.2(1)	- Pumps			X
112 Appendix F Section 1.3.2(2)	- Containment booms			X
112 Appendix F Section 1.3.2(5)	- Sorbents	X		

112 Appendix F Section 1.3.2(3)	- Chemical countermeasures			X
112 Appendix F Section 1.3.2(7)	- Communication equipment	X		
112 Appendix F Section 1.3.2(8)	- Firefighting equipment	X		
112 Appendix F Section 1.3.2(8)	- Personal protective equipment	X		
112 Appendix F Section 1.3.2(9)	- Other equipment, boats, motors, etc.	X		
112 Appendix F Section 1.7.2	Procedures have been established for recovering, reusing, decontaminating or disposing of materials	X		
Notes				

112 Appendix F Section 1.8.1	**G. Self Inspection**	**YES**	**NO**	**N/A**
112 Appendix F Section 1.8.1	Records of tank inspections are maintained (check last 5 years of records)	X		
	The following industry standard(s) are used to inspect aboveground bulk storage containers:	X		
	- Steel Tank Institute (STI) SP-1			X
	- American Petroleum Institute (API) Standard 653	X		
	- Hybrid program developed by Professional Engineer			X
	- Other (specify in notes/comments section below)			X
112 Appendix F Section 1.8.1	Records of secondary containment inspections are maintained (check last 5 years of records)	X		
112.20(h)(6), 112 Appendix F Section 1.6	Automatic discharge detection/prevention systems are inspected/tested regularly (overfill alarms, secondary containment sensors)	X		
112 Appendix F Section 1.8.3	Discharge prevention meetings are held periodically (check last 5 years of records)	X		
Notes				

112.20(h)(8)(ii), 112.21, Appendix F Section 1.8.2	H. Drills/Exercises	YES	NO	N/A
112.21(c), 112 Appendix F Section 1.8.2	Facility drills/exercises program is based on National Preparedness for Response Exercise Program (PREP) Guidelines	X		
	- If NO, alternative program has been approved by the EPA RA.			X
	QI notification drills are performed (quarterly)	X		
	Spill Management Team Tabletop Exercises are performed (annually)	X		
	Facility Equipment Deployment Exercises are performed (semi-annually)	X		
	Unannounced Exercises are performed (annually)	X		
	Area Exercises are performed	X		
Notes				

112.20(h)(9), 112 Appendix F Section 1.9	I. Diagrams	YES	NO	N/A
112 Appendix F Section 1.9(1)	Site plan diagram appears to accurately represent the facility	X		
112 Appendix F Section 1.9(2)	Drainage plan appears to accurately represent the facility	X		
Notes				

Field Notes	
Area	**Notes/Remarks**

Photo Documentation Log	
Photo Number	**Description (include date, location and direction)**
	Photo log is a part of the SPCC Inspection Checklist